REPORT RESUMES

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A DIRECTORY OF INFORMATION RESOURCES IN THE UNITED STATES.
PHYSICAL SCIENCES, BIOLOGICAL SCIENCES, ENGINEERING.
LIBRARY OF CONGRESS, WASHINGTON, D.C.

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A Directory of Information Resources in the United States

Physical Sciences
Biological Sciences
Engineering

THE LIBRARY OF CONGRESS

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National Referral Center for Science and Technology

January 1965

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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A Directory of Information Resources in the United States

Physical Sciences • Biological Sciences • Engineering

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Foreword

Established in 1962 in the Library of Congress with the support of the National Science Foundation, the National Referral Center for Science and Technology was given the responsibility of identifying all significant information resources in the fields of science and technology; acquiring data describing the specialized capabilities of these resources; and providing guidance about their use. This guidance was to be provided through direct assistance in response to requests for referral service and through the publication of directories and guides in various subject fields. With this directory, the Center begins to fulfill the latter of these two functions, initiating a publications program which will include the issuance of a subsequent directory for the social sciences, the preparation of a variety of listings in more specialized areas, and the recurrent updating and revision of all of these.

This directory has been drawn from the central register of information resources being built up on a continuing basis by the National Referral Center. Because that register is still evolving and growing rapidly at the time of publication, the directory itself must be considered as a preliminary and exploratory effort rather than as a properly comprehensive guide, or even a properly selective one. Many resources of known significance have been omitted, for lack of data or other reasons; some resources of uncertain value have been included because of that very uncertainty; descriptions of services and functions are frequently less clear than could be desired, for lack of definitive terminology. These and other constraints must await future correction.

The selection of resources included in the directory, however, serves to illustrate the concept that underlies the National Referral Center's efforts to alleviate the problem of scientific communication by guiding scientists and engineers to resources capable of meeting their specific information needs. This concept is inherent in the extremely broad interpretation given to the term "resource." Included under this interpretation are libraries and other traditional bibliographic services; centralized information centers capable of providing processed and evaluated data; professional societies and other organizations through which contact can be made with individual specialists; industrial firms willing to extend their information services beyond their own organization; Government agencies or offices able to provide assistance in specific areas of interest; and many other resources which make scientific and technical information available in some form.

Each entry in this volume has been submitted to the organization or institution it describes in order to insure that the text accurately reflects the activities of the resources selected.

The entries are listed in alphabetical order by organizational name. In cases where several information resources are parts of a single organization, such as a university or Government agency, the individual units are entered alphabetically under the main entry; cross references have been introduced to aid in locating specific units. In the subject index, the full names of the information resources are given below each pertinent subject term to allow for rapid scanning and identification. A more detailed explanation of the use of the index is given in the explanatory note on p. 277.

In a rapidly changing information network, no directory can be definitive. Comments on any facet of this volume are solicited, contributions for subsequent directories are welcomed, and users are encouraged to supplement the benefits drawn from these pages by directing requests for further guidance to the National Referral Center. It is hoped, however, that this first attempt will provide for increased awareness of the many and varied information resources that are available and will help to establish direct contact between members of the scientific and technical community.

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

19th and the Parkway
Philadelphia, Pa. 19103
Telephone: 564–3921 (Area code: 215)

The Academy, founded in 1812, conducts research in systematic biology; ecology; limnology; and the earth sciences, and maintains comprehensive collections in these fields. Its library, which includes the library of the American Entomological Society, contains mostly primary research literature in these fields from all over the world. In addition to some 125,000 volumes, there are extensive manuscript and map collections. The Academy also operates a natural history museum for the public with school teaching programs.

All facilities are available for use by scholars and advanced scientists. Industrial firms requiring extensive use of the library are asked to pay membership dues. Members of the Academy and institutions in the Philadelphia area may borrow books and receive other library service according to needs. The general public is welcome to use the reading room.

Notulae Naturae, a serial, monographs, and special publications appear at irregular intervals and may be purchased in individual copies. The annual *Proceedings of the Academy of Natural Sciences of Philadelphia* may be purchased as separates. *Frontiers*, a popular journal, *Notulae Naturae*, and the *Proceedings* are also available on subscription and through exchange. *Indo-Pacific Mollusca* is published at irregular intervals by the mollusk department of the Academy, and is sold on subscription.

ADHESIVE PRODUCTS CORP.

1660 Boone Avenue
New York, N.Y. 10060
Telephone: 542–4600 (Area code: 212)

The Corporation manufactures all types of adhesives, coatings, paints, fillers, and liquid plastics, but has as its primary purpose to assist industrial firms in solving adhesives and coatings problems. Laboratory and manufacturing experience is used in answering technical inquiries. Fees are determined on an individual basis. A complete laboratory is also maintained for molding and casting techniques.

AEROJET-GENERAL CORP.

The information facilities of the Corporation listed below are primarily for internal use. In all cases, documents are accessible for on-site reference by employees of the U.S. Government and Government contractors with certified need-to-know. Materials are not available on loan and searches are seldom made for other than corporate personnel.

Aerojet-General Nucleonics

Aerojet-General Corp.
Post Office Box 77
Foot of Fostoria Way
San Ramon, Calif. 94583
Telephone: 837–5311 (Area code: 415)

The Technical Information Department has a technical library of books, journals, reports, microform, microcards, documents, and pamphlets on nuclear physics, plasma physics, chemistry, fission chemistry, nuclear propulsion, engineering, materials and metals, mathematics, and nuclear technology. English, Spanish, French, Russian, and German sources are represented. All library accessions and documents are indexed in depth and retrieved by computer.

Corporate Technical Information Center

Aerojet-General Corp.
1100 West Hollyvale
Azusa, Calif. 91702
Telephone: 334–6211 (Area code: 213)

The Center maintains a collection on propulsion, infrared, oceanography, explosive ordnance, propulsion chemistry, structural materials, missile guidance and control systems, automatic warehousing and distribution systems, torpedoes, nuclear reactors, auxiliary power systems, space research, fission chemistry, aeronautics, life sciences, rockets, filament winding, electronic systems, and weapon systems. The library contains books, journals, reports, patents, films and photos, data, and maps and charts. Sources are in English, French, and German. Information contained in corporation reports is indexed in depth and retrieved mechanically.

Technical Library

Aerojet-General Corp.
11711 Woodruff Avenue
Downey, Calif. 90241
Telephone: 773–0130 (Area code: 213)

The Library contains books, journals, and reports. Subjects covered are aerospace ordnance, physics, chemistry, mathematics, optics, and metallurgy. English, Spanish, French, and German sources are used.

Technical Library

Aerojet-General Corp.
Post Office Box 947
Highway 50(F)
Sacramento, Calif. 95809
Telephone: 355–6343 (Area code: 916)

The Library acquires books, journals, reports, and commercial catalogs. Subject specialization is chemistry, rocket propellants, metallurgy, engineering, rocketry, rocket propulsion, mathematics, and allied subject areas. Foreign literature comes from Spanish, French, German, and Russian sources. Over 60,000 internal and external technical reports are indexed in depth on a computer retrieval system. Computer tapes are received from the National Aeronautics and Space Administration's Scientific and Technical Information Facility and searched on local computers.

AEROPHYSICS RESEARCH FOUNDATION

Santa Barbara Municipal Airport
Goleta, Calif.
Telephone: 967–1246 (Area code: 805)

A nonprofit institution, the Foundation has a literature collection on climate and meteorology. Holdings comprise books, journals, technical reports, films and photos, maps and charts, and data. Languages represented are English, Russian, Spanish, French, and German.

A consulting service is provided as a courtesy. Some material in the collection is available for loan. Photoduplication is possible at a fee.

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.

1725 DeSales Street NW.
Washington, D.C. 20006
Telephone: 347–2315 (Area code: 202)

A general aeronautical library is maintained by the Association, consisting of books, periodicals, journals, Government reports and hearings, industrial literature, and the *Aerospace Yearbook* for the period 1919–62. The collection also includes documents pertaining to the aerospace industry, such as monographs from universities and Federal agencies in the fields of economics, finance, investigations, and statutes; and in-house documents, such as surveys and studies.

Material in the library is organized for both research and reference. The collection is accessible for direct use by member companies and other approved visitors. Reference material may be searched on the premises only. Technical inquiries are directed to members of the staff of the Association or to Association companies. A limited copying service is available.

Periodical publications include *Aerospace,* a quarterly, free at the discretion of the Association; the annual *Aircraft, Missiles, and Spacecraft,* available on request; and *Aerospace Facts and Figures,* an annual publication provided on request. Other reports and studies issued occasionally are also available.

AEROSPACE RESEARCH APPLICATION CENTER, *See* INDIANA UNIVERSITY

AGRICULTURAL BOARD, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

AGRICULTURAL HISTORY SOCIETY

Room 3869, South Agriculture Building
U.S. Department of Agriculture
14th Street and Independence Avenue, SW.
Washington, D.C. 20250
Telephone: 388–4437 (Area code: 202)

The Society's interest is in the worldwide history of agriculture by periods, localities, regions, and States. Subject coverage includes irrigation; collective, plantation, family size, and part-time farming; geographical factors; colonization and settlement; land policies; commodities, buildings, equipment, implements, machinery, and technology; labor; tenancy; transportation; communications; trade; agricultural economics and research; and agriculture museums.

The Executive Secretary gives advice and information in the field, as well as guidance in the use of the Society's bibliographic card index. He also provides information on current research projects. There is no fee; the service is provided to scholars and others seeking information for research or writing projects.

Agricultural History, issued quarterly, is available by subscription.

AGRICULTURAL MARKETING SERVICE, *See* U.S. DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH INSTITUTE, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

AIR-CONDITIONING AND REFRIGERATION INSTITUTE

1815 North Fort Myer Drive
Arlington, Va. 22209
Telephone: 524–8800 (Area code: 703)

A trade association, ARI develops and establishes standards for air-conditioning and refrigeration equipment and components, including unitary air-conditioners; heat pumps; liquid-chilling packages; heat-transfer equipment; valves, driers, fittings, and accessories; self-contained icemakers; cooling towers; water coolers; and mobile air-conditioning and refrigeration. Freight rates and traffic problems are also studied.

The Institute will answer general questions without charge, but it does not recommend manufacturers or equipment. The standards and related publications issued by the Institute may be purchased at published prices.

AIRCRAFT TECHNICAL SERVICE, INC.

16042 Arminta Street
Van Nuys, Calif. 91406
Telephone: 786–5341 (Area code: 213)

An independent consulting firm, Aircraft Technical Service deals in aircraft and aircraft-component analysis and design; preparation of drawings; prototype construction and testing; and design, fabrication and testing of electrical, pneumatic, hydraulic, and mechanical special-purpose machines. Service is available only on a fee basis.

AIR POLLUTION CONTROL ASSOCIATION

4400 Fifth Avenue
Pittsburgh, Pa. 15213
Telephone: 621–1100 (Area code: 412)

A technical society, the Association promotes atmospheric pollution control, improvement of air sanitation, and air purification. Its technical committees, which develop manuals and standards and recommend practices are: marine, chemical, petroleum, coal, public utilities, steel, ferrous foundries, nonferrous smelting and refining, nonferrous foundries, waste disposal, incinerators, oil burners, dust, fumes, mists and fog collectors, stokers, odor and gas treatment, meteorological, power boiler equipment and vehicular exhaust. Other technical committees include research, air pollution measurements, economic effects, radiation, ambient air standards, atmospheric reactions, agricultural, health matters, and planning and zoning. The APCA also works in cooperation with appropriate committees of the American Standards Association, the American Society for Testing and Materials, and other technical societies.

The monthly *Journal of the Air Pollution Control Association* is devoted to technical papers on air pollution and its control, and to news concerning current activity in the field. *APCA Abstracts* is a monthly summary of current literature on air pollution control. Both these periodicals are available to members on a regular basis and to nonprofit libraries on subscription. Reports from the technical committees are published for the membership on completion. Reprints, preprints, journals, proceedings, and abstracts are for sale.

AIR TRANSPORT ASSOCIATION OF AMERICA

1000 Connecticut Avenue, NW.
Washington, D.C. 20006
Telephone: 296–5800 Extension 229 (Area code: 202)

A national organization of domestic airline operators, ATA concerns itself with the legal and economic aspects of the industry. It collects the official statistical and administrative reports of transportation regulatory agencies, Congressional documents relating to transportation, special industry studies, and standard transportation texts. Its library also contains the annual reports and house organs of U.S. scheduled airlines, selected reports of some foreign airlines, and legislative histories in the civil aviation field for the period 1926–38.

The collection is primarily for the use of ATA personnel, but it is also accessible to researchers and others working on special projects. Books are available on interlibrary loan.

ALBANY METALLURGY RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

ALEXANDER GRAHAM BELL ASSOCIATION FOR THE DEAF, INC.

Volta Bureau
1537 35th Street, NW.
Washington, D.C. 20007
Telephone: 337–5220 (Area code: 202)

The Association provides information on deafness, hearing, lipreading, hearing aids, and education of the deaf. It maintains a collection of over 20,000 volumes in its John Hitz Memorial Library. There are no restrictions on the on-site use of the library, but loans are made only to members. No reproduction, literature searching, or abstracting services are available.

Volta Review, the monthly magazine of the Association, may be obtained by subscription. The *Parents' Section Newsletter,* which appears 10 times a year, is free to all parent members of the Association.

ALL AMERICAN ENGINEERING CO.

P.O. Box 1247
Lancaster Pike and Centre Road
Wilmington, Del.
Telephone: 994–0951 (Area code: 302)

The Company is engaged in research and development, testing, and manufacture related to surface-to-air and air-to-air recovery techniques and equipment, including pickup winches; handling gear; parachutes; and the design of aerial recovery systems suitable for various types of aircraft. It also performs the same functions regarding aircraft catapult and arresting systems; low-level cargo delivery systems; and instrumentation devices.

Answers to technical questions and consulting and document services are provided to Government agencies and to potential customers. Inquiries requiring little time or effort are answered without charge; those needing intensive research are handled on a contractual basis.

The quarterly *All American Word* is available free on request.

ALLEGHENY LUDLUM STEEL CORP.

Research Center Library

Alabama and Pacific Avenue
Brackenridge, Pa. 15014
Telephone: 226–2000 (Area code: 412)

The Library provides coverage in metallurgy, iron and steel making, melting, mechanical working, hot and cold rolling, extrusion, powder metallurgy, heat treating, metallography, welding, joining and assembling, transformation and resulting structures, physical properties and their measurements, mechanical properties and tests, corrosion, inspection and control, instrumentation, and laboratory and control equipment. Material consists of books, journals, reports, patents, films and photos, data, and technical translations.

Company-generated reports, except unclassified Government reports, may be furnished, subject to approval by the Director of Research. All other reports are available for loan.

ALLEGHENY OBSERVATORY, *See* UNIVERSITY OF PITTSBURGH

ALLEN WEATHER CORP.

4461 Connecticut Avenue, NW.
Washington, D.C. 20008
Telephone: 363–7221 (Area code: 202)

A commercial institution, the Corporation offers a consultant service, for a fee, on the state of the atmosphere and the oceans to meet specific problems in business and industry, such as tunnel and bridge building and shipping. Access to the Corporation's collection of books, journals, reports, data, and maps and charts is restricted to clients.

The *Ocean Weather Guide,* issued monthly or bimonthly, is useful to the marine industry only.

ALLIED CHEMICAL CORP.

Central Research Laboratory

Morristown, N.J. 07960
Telephone: 538–8000 (Area code: 201)

In support of the Central Research Laboratory, the Corporation maintains two libraries and a Central Information Service. The General Chemical Library contains about 10,000 volumes dealing with inorganic, organic, and agricultural chemistry; it also has an extensive collection of U.S. patents arranged by class. The Central Research Library contains about 4,000 volumes covering organic and polymer chemistry; U.S. chemical patents are held in microform. The Central Information Service maintains a computer retrieval system for corporate research data.

All services are maintained for company employees, with limited access to others upon special arrangement.

ALLIED RESEARCH ASSOCIATES, INC.

Virginia Road
Concord, Mass. 01742
Telephone: 369–9000 (Area code: 617)

The ARA has a library which serves chiefly to provide reference service for company personnel in the field of physics, particularly nuclear physics, weapon effects, mathematics, and materials sciences. However, the books, journals, reports, and data in the collection are made available to outsiders for on-site reference.

ALLIS CHALMERS MANUFACTURING CO.

Atomic Energy Division

6935 Arlington Road
P.O. Box 5976
Bethesda, Md. 20014
Telephone: 657–3200 (Area code: 202)

The Division has a technical library of books, journals, periodicals, reports, patents, and classified information on nuclear engineering, associated nuclear physics, and general engineering. It is open to the public for on-site use by appointment. Reference, loan, and document services are available without charge.

ALLOY CASTING INSTITUTE

300 Madison Avenue
New York, N.Y. 10017
Telephone: 682–8414 (Area code: 212)

The Institute is an association of high-alloy foundries in the United States and Canada and is active in several technical areas: it furthers the development and use of high-alloy castings of the iron-base and nickel-base, iron-chromium-nickel types by improving their quality and characteristics under various thermal, corrosive, and abrasive conditions; it studies additional fields and new applications for expanding the use of alloy castings; it studies and improves foundry practice and techniques in such areas as castability, weldability, and machinability; and it establishes standards and specifications.

As a center for technical information on cast high alloys, ACI makes available data compiled from the books, journals, reports, patents, films, and photographs in its collection, and provides a consulting service. There is no charge.

The *Alloy Casting Bulletin,* a primary journal; *8 Plus,* a news journal; and *Standard Designations,* for alloy grades, are issued gratis at irregular intervals. *Data Sheets* and the *High Alloy Foundry Directory* may be purchased. Findings of research sponsored by members of the Institute are also published; however, progress reports on ACI research projects are available only to members.

ALL-TRONICS, INC.

45 Bond Street
Westbury, N.Y. 11590
Telephone: 333–3090 (Area code: 516)

All-Tronics maintains a commercial testing laboratory specializing in radio frequency interference, including control, evaluation, filters, and testing. It provides consulting and testing services primarily to manufacturers of interference-producing devices. Fees are determined individually.

ALUMINUM SIDING ASSOCIATION

2217 Tribune Tower
435 North Michigan Avenue
Chicago, Ill. 60611
Telephone: 644–0828 (Area code: 312)

Through its technical committee, the Aluminum Siding Association has developed standards and specifications and published a number of leaflets on various aspects of aluminum siding and its uses, such as *Your Questions Answered About Aluminum Siding, Hail Damage, Lightning Legend, Grounding Statement,* and *Residential Installation Specifications.*

Technical questions are answered, and publications are available to the general public for purchase. Statistical or market research data are not available.

AMERICAN ACADEMY OF IMPLANT DENTURES

2120 Ocean Avenue
Brooklyn, N.Y. 11229
Telephone: 339–8400 (Area code: 212)

An affiliate of the American Dental Association, the Academy promotes the dissemination of information on dentistry, particularly on prosthetic dentistry, implant dentistry, homogenous and autogenous grafts, dentures, and odontology. It maintains a collection of technical papers which review and report past, current, and future concepts in the field, and which are available to both professionals and laymen without charge. There is also a limited collection of books, journals, and films.

Inquiries about specialized problems are handled through a consulting service by Dr. A. Norman Cranin, 2120 Ocean Avenue, Brooklyn, N.Y., 11229. A monthly newsletter is distributed free to members. The annual *Journal of Oral Implant and Transplant Surgery* is available for purchase.

AMERICAN ASSOCIATION OF HOSPITAL CONSULTANTS

908 South Main Street
Dayton, Ohio 45402
Telephone: 223-6192 (Area code: 513)

A professional society of consulting physicians and administrators, the Association provides consultation services to hospitals and related institutions on community health facilities surveys; hospital planning, construction, and equipment; administrative and medical audits; and medical staff organization and relationships.

The *American Association of Hospital Consultants Directory,* issued biennially, gives biographical data on members and describes the services they perform. Reprints of pertinent articles are distributed regularly to Association members.

AMERICAN ASSOCIATION OF MUSEUMS

2306 Massachusetts Avenue, NW.
Washington, D.C. 20008
Telephone: 483-3381 (Area code: 202)

The documentation center of the Association compiles data on the location and capabilities of all museums in the United States and Canada, including science museums, planetariums, zoos, aquariums, botanical gardens, and arboretums. It assembles information on their collections, the purpose they serve, and the extent and kind of their personnel. Reference, referral, and consulting services are provided without charge, particularly to members, institutional and individual.

The Association publication, *Museums Directory of the United States and Canada,* may be purchased. *Museum News,* which appears ten times per year, and *Reports,* published at irregular intervals, are membership privileges not available by subscription, but individual copies of both are sold and mailed when ordered from the Association.

AMERICAN ASSOCIATION OF NURSERYMEN, INC.

835 Southern Building
1425 H Street, NW.
Washington, D.C. 20005
Telephone: 737-4060 (Area code: 202)

The headquarters of this national Association provides a referral service on ornamental horticultural gardening and landscaping, nursery stock, horticultural standards, plant quarantine, nomenclature, trade practices and ethics, horticultural training and education, and the Federal laws as well as administrative regulations of the various Federal agencies with which the industry must comply.

Inquiries not directly relating to the nursery industry are referred to other societies, organizations, or individuals. Technical questions on production problems are referred to extension specialists at state land grant colleges.

The Association publishes regularly industry information bulletins, legislative bulletins, a research summary letter, a monthly merchandising bulletin, and an annual supply directory.

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS

National Headquarters
Post Office Box 886
Durham, N.C. 27702
Telephone: 549-8141 (Area code: 919)

A technical and scientific society, the AATCC serves the textile and related industries. Its research committees are concerned with such problems as colorfastness to light, laundering, perspiration, and dry-cleaning; flammability; water repellency; static; and the performance of fabrics and finishes. Four major categories under which AATCC test methods are grouped include: identification and analysis, colorfastness, physical properties, and biological properties. The Association has developed standard tests methods, procedures, and devices in order to evaluate performance capabilities in the field of wet-processing.

The Association will answer technical questions or make referrals to local sections or technical committees. There is no fee.

The biweekly *American Dyestuff Reporter* and annual *Technical Manual* are free to members and available to others by subscription. The latter contains all AATCC test methods, a current list of American resin-bonded pigment colors and American-made dyes with their manufacturers' and new color index names and numbers, and an extensive bibliography on current literature relating to textiles.

AMERICAN ASSOCIATION ON MENTAL DEFICIENCY

1601 West Broad Street
Columbus, Ohio 43223
Telephone: 279–8651 (Area code: 614)

The American Association on Mental Deficiency, under contract to the National Clearinghouse for Mental Health Information, is in the process of developing a documentation service in mental retardation and publishing a quarterly journal entitled *Mental Retardation Abstracts*. Each issue of the *Abstracts,* distributed by the U.S. Department of Health, Education, and Welfare, will include 300 abstracts on the world literature dealing with mental retardation. Inquiries concerning the documentation service or subscriptions to *Mental Retardation Abstracts* should be directed to the Association.

The *American Journal of Mental Deficiency* and *Mental Retardation,* bimonthly publications, are available to nonmembers on subscription.

AMERICAN ASTRONAUTICAL SOCIETY

516 Fifth Avenue
New York, N.Y. 10036
Telephone: 682–3383 (Area code: 212)

A professional society, the American Astronautical Society maintains a collection of books, journals, and data on various aspects of the space sciences. Subject coverage is astronautics, spacecraft, space flight, space environment, guidance, control, astrodynamics, bioastronautics, navigation, propulsion, orbits and trajectories, solar physics, radiation, planetary environment, flight mechanics, and space medicine.

Technical inquiries are answered without charge. Society publications available for purchase are: *Journal of the Astronautical Sciences,* issued quarterly, and *Advances in the Astronautical Sciences,* AAS proceedings issued in about three volumes each year. Back issues of these publications and copies of the *Astronautical Sciences Review,* a discontinued series, are available from Western Periodicals, Inc., 13000 Raymer Street, North Hollywood, Calif., 91605. A bimonthly *Newsletter* is distributed to members.

AMERICAN BIO-SYNTHETICS CORP.

710 West National Avenue
Milwaukee, Wis. 53204
Telephone: 384–7017 (Area code: 414)

An industrial research organization, the American Bio-Synthetics Corp. conducts research in the agricultural, biological and pharmaceutical sciences; general and polymer chemistry; engineering; plastics; and resins. Special areas of interest include automated distillation equipment, proteins, peptides, amino acids, and hormone research. Pilot plants are maintained for the experimental production of commercially unobtainable peptides, enzymes, hormonal preparations, gland extracts, and animal and human body fluids. Chemical, bacteriological, physical, and environmental testing services are provided to Government and industry.

A library of books, journals, reports, patents, and films and photos is maintained on chemistry, biochemistry, and microbiology. There are also complete files of current Government tests and specifications for various materials. Reference and document services are restricted to company personnel; however, interlibrary cooperation is encouraged.

AMERICAN BUREAU OF METAL STATISTICS

50 Broadway
New York, N.Y. 10004
Telephone: 944–1870 (Area code: 212)

A nonprofit trade association supported by producers of copper, lead, and zinc in the United States, Canada, Mexico, Chile, and Peru, the Bureau compiles and releases statistics on the economics of nonferrous minerals and metals.

The *Year Book,* which provides statistical information for market analysis, research, and industry surveys, may be purchased. Monthly and quarterly statistical reports may be obtained on a subscription basis, and are issued as *Copper Series, Lead Series, Zinc Series, Aluminum Series, Gold Series,* and *Silver Series.*

AMERICAN CAMELLIA SOCIETY

Coastal Plain Experiment Station
Box 465
Tifton, Ga. 31794
Telephone: 382–5561 (Area code: 912)

In collaboration with the Coastal Plain Experiment Station and other research organizations, the Society promotes interest in genus Camellis, L.; conducts scientific research in its culture and pest control; effects standardization of its varietal names and certification of new varieties; and disseminates information concerning these activities.

The Society library collections of books, journals, reports, films, photographs, and data are available for use without restriction. Reference, consulting, and document services are also available without charge. The annual 300-page *American Camellia Yearbook* and the *Camellia Journal,* which appears five times per year, are free to members and may be purchased by others.

AMERICAN CANCER SOCIETY, INC.

219 East 42d Street
New York, N.Y. 10017
Telephone: 686–4300 (Area code: 212)

The Medical Library of the American Cancer Society is a repository for information on the medical, statistical, and public health aspects of oncology and related subjects, such as biochemistry, cytology, and radiobiology. It also acts as a clearinghouse for information on developments in the field of neoplastic diseases and aids in disseminating information to the national staff, the 60 divisions and other local units of the American Cancer Society throughout the United States.

Services available include direct loan or interlibrary loan of books, journals, and films. Literature searches are made in response to specific requests. Current project data are made available, as are bibliographies. A file of article reprints is maintained, indexed by author and subject, and may be borrowed through the package lending service. Reports of research carried out under Society grants constitute a special collection and are available for loan.

The Society publishes *Cancer,* a monthly, and *CA-Cancer Journal for Clinicians,* which appears bimonthly. Both are available on subscription. The semiannual *Cancer News,* pamphlets on various aspects of cancer, and proceedings of scientific symposia are distributed without charge.

AMERICAN CERAMIC SOCIETY, INC.

4055 North High Street
Columbus, Ohio 43214
Telephone: 268–8645 (Area code: 614) TWX 614–759–0014

An organization for the promotion of the art and science of ceramics, with a membership of over 8,700 in 47 different countries, the Society serves as a forum for the exchange of scientific information and publishes papers on scientific and technical research in all areas of ceramics; glass; refractories; porcelain enamels; cermets; composites; whitewares; structural clay products; nuclear and electronic ceramics; analytical, crystal, and colloid chemistry; solid state physics; and instrumentation for high temperature reactions.

The Society's library includes material in Russian, Italian, French, German, Spanish, and Japanese. Information services are limited to general reference assistance and answers to routine technical questions.

Significant papers on current research and development of value to the ceramic industry are published in the Society's two monthly serials, *Journal of the American Ceramic Society* with *Ceramic Abstracts* and *The American Ceramic Society Bulletin.* In addition, the Society has sponsored publications of ceramic technical interest, including *Phase Diagrams for Ceramists, Ceramic Glossary, Ceramic-Metal Systems and Enamel Bibliography and Abstracts,* and *Symposium on Nucleation and Crystallization in Glasses and Melts.*

AMERICAN CHEMICAL SOCIETY

1155 16th Street NW.
Washington, D.C. 20006
Telephone: 737–337 Extension 279 (Area code: 202)

Division of Rubber Chemistry Library and Information Service

University of Akron
302 East Buchtel Avenue
Akron, Ohio 44304
Telephone: 762–2441 (Area code: 216)

Chemical Abstracts Service

Ohio State University
2041 North College Road
Columbus, Ohio 43210
Telephone: 293–2085 (Area code: 614)

The American Chemical Society disseminates scientific information through its journals and other publications and maintains at its Washington headquarters the Applied Publications Library, a reference collection for staff editors and writers. Books, journals, and reports are collected on all aspects of chemistry and chemical technology. The Library is open to the public for on-site reference. Material may be borrowed on interlibrary loan. The Society's Information Office, also in Washington, supplies general information on the Society's activities and publications.

The Division of Rubber Chemistry of the Society maintains a literature collection on plantation rubber, the history and development of the rubber industry, and the chemistry and technology of both natural and synthetic rubbers. Holdings consist of books, journals, and reports. On-site use of materials is provided and reference service is available without charge. There is a nominal service fee for reproduction of material. A list of bibliographies available for purchase may be obtained on request. The Division's publication, *Rubber Chemistry and Technology,* is issued five times a year.

The Chemical Abstracts Service, another division of the Society, provides an abstracting and indexing service in chemistry and chemical engineering. It publishes *Chemical Abstracts,* a biweekly abstract journal that covers over 9,500 journals in 52 languages originating in 100 countries. The publication also abstracts patents from 24 countries. Each issue of *Chemical Abstracts* contains an author, patent, and keyword index and is published in five sections providing coverage in the following areas: physical chemistry, including inorganic and analytical chemistry; applied chemistry; organic chemistry; macromolecular chemistry; and biochemistry. Other publications of the Chemical Abstracts Service are the *Sixth Collective Index to Chemical Abstracts,* covering the period 1957–61; the *Ring Index* which, with its two supplements, lists about 12,000 molecular ring systems noted in the abstracted literature through 1961; and *Chemical Titles,* a keyword-in-context index, issued biweekly, which is derived from the titles of chemical papers in some 650 journals. As a guide to locating journals abstracted in *Chemical Abstracts,* a list of periodicals abstracted is published every 5 years, with annual supplements. A photocopying service for Soviet chemical journals and patents is also provided. A list of CAS publications available for sale from the American Chemical Society is contained in the brochure, *Chemical Abstracts in 1964—A Catalog of Services,* distributed without charge from the Society's headquarters in Washington, D.C.

The Society makes available on subscription the following fundamental journals: *Journal of the American Chemical Society,* semimonthly; *Journal of Organic Chemistry,* monthly; *Journal of Physical Chemistry,* monthly; *Biochemistry,* monthly; *Journal of Medicinal Chemistry,* bimonthly; *Inorganic Chemistry,* monthly; *Journal of Chemical Documentation,* quarterly; *Journal of Chemical and Engineering Data,* quarterly; *Chemical Reviews,* bimonthly; and *Journal of Chemical Education,* monthly.

Journals in applied chemistry are also available on subscription. These include: *Chemical and Engineering News,* weekly; *Analytical Chemistry,* monthly; *Journal of Agricultural and Food Chemistry,* bimonthly; *Industrial and Engineering Chemistry,* monthly; *Industrial and Engineering Chemistry International Division,* monthly; *I&EC Process Design and Development,* quarterly; *I&EC Fundamentals,* quarterly; *I&EC Product Research and Development,* quarterly; and *Chemistry,* monthly.

AMERICAN COLLEGE OF APOTHECARIES

Hamilton Court
39th and Chestnut Streets
Philadelphia, Pa. 19104
Telephone: 386–5566 (Area code: 215)

This professional society of pharmacists disseminates information on pharmaceutical practice and its relationship to public health. Officials are available for informal consultations without charge. The extent of service is governed by the nature of the inquiry.

Facts on the Operation of Prescription Pharmacies, published by the Society and available for purchase, pertains to pharmacy management, operating costs, prescription volume, inventories, profits, procedures, fees, and services.

AMERICAN COLLEGE OF SURGEONS

55 East Erie Street
Chicago, Ill. 60611
Telephone: 664–4050 (Area code: 312)

An organization with 26,000 members in 79 countries, the College has as its objective the improvement of standards of surgery. It initiates programs to educate the profession and the public on the qualifications of surgeons, the ratings of hospitals, and on acceptable methods for treatment of illnesses and injuries. A library is maintained, consisting of an extensive collection of rare books, documents, and old instruments related to the history of surgery, with particular emphasis on American surgery. Reference service and referral services are available without charge to physicians and surgeons and to others judged to be engaged in bona fide research. The collection is available without charge, but must be used on the premises.

The College prepares and distributes annually a list of approved films for the teaching of surgery. Other publications issued regularly by the College are *Surgery, Gynecology, and Obstetrics,* a monthly; *Bulletin of the American College of Surgeons,* a bimonthly; and the annual *Surgical Forum.* The *Bulletin* is not available on subscription.

AMERICAN COMMITTEE ON ARTHROPOD-BORNE VIRUSES, *See* UNIVERSITY OF CALIFORNIA, BERKELEY

AMERICAN CONCRETE INSTITUTE

22400 West 7 Mile Road
Detroit, Mich. 48219
Telephone: 531–8102 (Area code: 313)

The Institute develops and disseminates information on the design, construction, and maintenance of concrete structures; the manufacture and use of concrete products; and the establishment of building code requirements for concrete. It acquires and abstracts selected books and journals in all major languages. Answers to specific questions are provided, directly or through referral, without charge. Publications are also furnished in response to inquiries and are available to members at reduced rates.

The monthly *Journal of the American Concrete Institute* is free to members and available to others on subscription. An annual index is published in the final volume of the *Journal* for each year. In addition, a 55-year *Index* (1905–59) has been issued, and a 5-year supplement to it is projected. Other informational material published by the Institute is listed in its *Catalogue of Publications.*

AMERICAN COUNCIL OF INDEPENDENT LABORATORIES, INC.

1026 17th Street, NW.
Washington, D.C. 20036
Telephone: 393–5674 (Area code: 202)

A professional association, ACIL publishes a *Directory* containing an index of services provided by member laboratories in most areas of science and technology. When an inquirer cannot locate likely sources of information in the *Directory,* he is given the names of laboratories where the answer to his question may be obtained. Many of the members have libraries and data banks; however, the use of these facilities and the answering of queries must be negotiated by the inquirer. The *Directory* is free upon request when available.

The quarterly *ACIL Bulletin* is also available upon request at no charge.

AMERICAN CYANAMID CO.

Stamford Research Laboratories

1937 West Main Street
Stamford, Conn. 06902
Telephone: 348–7331 (Area code: 203)

The Technical Information Center of the Laboratories maintains a collection of journals, books, reports, patents, films, and data concerning chemistry and chemical engineering, including physical, organic, and inorganic chemistry; fibers; plastics, resins, and polymers; and instrumentation. Language input is English, Russian, Italian, French, German, and Japanese.

Information activities include reference, translating, document, and consulting services. They are limited in general to Company employees; however, reading room facilities and photocopying services may be available to nonemployees provided advance arrangements have been made.

AMERICAN DENTAL ASSOCIATION

222 East Superior Street
Chicago, Ill. 60611
Telephone: 944–6730 (Area code: 312)

A national professional society with over 100,000 members in 500 State and local units, the Association is a source for information on all aspects of dentistry, including anesthesiology, operative dentistry, oral surgery, orthodontics and oral development, pedodontics, periodontics, prosthodontics, practice administration, dental public health, research, dental history, and roentgenology.

Its Bureau of Library and Indexing Service has collections of basic dental books in English and other languages; dental journals published in the United States and abroad; and package libraries consisting of reprints, clippings, copies of articles, and reference citations arranged in folders according to specific subject.

A research division of the Association, located at the U.S. National Bureau of Standards, Washington, D.C., collects research data on dental materials which are available without charge to dental practitioners, manufacturers of dental materials, dental schools, and Federal dental services.

Services are primarily for members of the Association; requests by others are considered individually. Inquiries involving professional opinions are handled by specialists. The Bureau of Library and Indexing

Service answers most technical questions by lending package libraries for a fee. Books and dental journals are available for loan to members without charge. For nonmembers, interlibrary loans are provided. The Bureau has a photoduplication service and provides consultation in nomenclature and history. New acquisitions and listings for package libraries are described in *Books and Package Libraries for Dentists,* issued annually.

Among the publications issued by the Association are *Index to Dental Literature,* issued quarterly and available for purchase; *Dental Abstracts,* a monthly abstract journal available on a yearly subscription; *American Dental Directory,* issued annually and available for purchase; *Journal of the American Dental Association,* a monthly journal free to members but available to others on a yearly subscription; *Accepted Dental Remedies,* an annual handbook on drugs and available for sale; *Journal of Oral Surgery,* a bimonthly publication available on subscription; *Guide to Dental Materials,* including ADA *Specifications for Dental Materials,* issued for sale biennially; *ADA Newsletter,* issued every other week on subscription. Two publications are free: *Dental Health Highlights,* a monthly, and *ADA Catalog,* issued annually. Special reports on dental personnel and practice prepared by the Association's Bureau of Economic Research and Statistics may be purchased.

AMERICAN DOCUMENTATION INSTITUTE

Room 305, 2000 P Street, NW.
Washington, D.C. 20006
Telephone: 332–7822 (Area code: 202)

A nonprofit institution, ADI is interested in the theory, practice, research, and development of all elements involved in the communication of recorded specialized information. Solutions to the varied and diverse problems of documentation are experimentally sought in such fields as psychology, symbolic logic, linguistics, operations research, data processing, and communication techniques. Areas of research and development activities include apparatus and applications of microphotography, development of superimposable cards and coordinate indexing, microfilm and punched card techniques for literature searching, analysis and development of electronic devices for information storage and retrieval, classification and coding systems, studies in the use of recorded information, telefacsimile for the dissemination of information, and machine translation of languages.

The Institute's information center provides reference, reprint, and limited consulting services. While generally limited to ADI members or subscribers to *American Documentation,* these services are also available to others on an individual basis.

The auxiliary publications program of ADI consists of a central depository in the Photoduplication Service of the Library of Congress, where an editor of a scientific, technical, scholarly, or abstracting journal or publication may deposit auxiliary data, such as tables, photographs, charts, graphs, and bibliographies, which he considers too extensive for complete publication in standard form. The document number, price, and availability of the material must be published as a footnote to the article itself. Photocopies may be obtained by anyone furnishing the document number and the requisite fee.

The ADI quarterly journal, *American Documentation,* which contains reports of documentation research done throughout the world, specialized bibliographical studies, and critical and descriptive papers on all aspects of the subject, is available by subscription. The *ADI Newsletter* is distributed at irregular intervals to members only.

AMERICAN DRY MILK INSTITUTE, INC.

221 North La Salle Street
Chicago, Ill. 60601
Telephone: 782–4888 (Area code: 312)

The Institute provides technical information and economic statistics and data on all forms of dry milks, including nutritional contributions, formulations, sanitation, quality control, and marketing. All materials are free to Institute members, Government agencies, educational institutions, students, and users of dry milks; there is a nominal charge to others. Material is not available to booksellers.

AMERICAN ELECTROENCEPHALOGRAPHIC SOCIETY

Kenneth A. Kooi, M.D., Secretary
University of Michigan Medical Center
Ann Arbor, Mich. 48104
Telephone: 663–1531 (Area code: 313)

A professional society of electroencephalographers, neurophysiologists, and electroencephalographic technicians, AEEGS has no permanent headquarters. Referrals to specialists in the field are made through the secretary.

AMERICAN FARM RESEARCH ASSOCIATION

402 Northwestern Avenue
West Lafayette, Ind. 47906
Telephone: 743–2900 (Area code: 219)

Sponsored by the American Farm Bureau and farmer-owned cooperatives in the central and northeastern United States, the Association has an information service which exploits new scientific findings for the practical use of farmers and cooperatives. Particular emphasis is placed on the production and distribution of farm commodities. To implement the Association's objectives, there are committees on fertilizer technology, soil fertility and plant nutrition, feed technology and animal nutrition, seed and agricultural chemical technology, and petroleum distribution and marketing.

Use of the Association's books, journals, reports, data, nonprinted material, and consulting services are limited primarily to technical personnel of member cooperatives.

AMERICAN FISHERIES SOCIETY

1404 New York Avenue, NW.
Washington, D.C. 20005
Telephone: 347–9717 (Area code: 202)

A professional association, the Society disseminates information on fish, fishing, and fisheries in North America. Areas of interest are hydrobiology, fish culture, commercial fisheries, fisheries management and conservation, ichthyology, limnology, biology, nutrition as related to fish, life histories and names of fish, water pollution, techniques of scientific work for data collection in waters, fish hatcheries, and recreational fishing.

The Society restricts its services to scientists and to persons working in allied fields. Technical questions are answered either by brief bibliographic searches or by referral to an authority on the subject, selected from a list of specialists throughout the United States who are members of the Society. There is no fee. Questions from the public are generally referred to other appropriate national and local organizations and agencies.

Periodicals issued by the Society include the bimonthly *AFS Newsletter* and the quarterly *Transactions*. Pamphlets are also available.

AMERICAN FOREST PRODUCTS INDUSTRIES, INC.

1816 N Street, NW.
Washington, D.C. 20036
Telephone: 338–3330 (Area code: 202)

An educational organization, AFPI represents all segments of the industry. It maintains a library and public information service concerned with forest management; conservation, including fire prevention, insects, and diseases; watersheds; forest industry lands; tree farms; logging; sawmills, pulp mills and their products; organic chemicals produced by wood distillation and hydrolysis plants; and plywood and veneer mills.

Information activities conducted as a public service include reference, referral, and consulting services, preparation of state-of-the-art reviews, and evaluations of school textbooks. Films for school and industry are available on loan; photos are available for industry, authors, and publishers. A collection of forestry statistics and national tree farms records are accessible at the discretion of the Institute.

Bibliography of Teaching Aids, which may be obtained free upon request by teachers and educators, lists a series of booklets, films, maps, and charts issued by the Institute for classroom use. Other publications include special reports prepared for selected forestry and conservation groups.

Information services similar to those offered in Washington, D.C., may be obtained at branch offices in Atlanta, Ga.; Boston, Mass.; Chicago, Ill.; Cincinnati, Ohio; Denver, Colo.; Green Bay, Wis.; Harrisburg, Pa.; Memphis, Tenn.; New York, N.Y.; Portland, Oreg.; Raleigh, N.C.; San Francisco, Calif.; Shreveport, La.; and Seattle, Wash.

AMERICAN FORESTRY ASSOCIATION

919 17th Street, NW.
Washington, D.C. 20006
Telephone: 638–1820 (Area code: 202)

A national voluntary conservation organization, the American Forestry Association has a library and provides information and public education services. Subject coverage is forest conservation, including timber management, forest protection, watershed management, wildlife protection, outdoor recreation, and allied subjects.

The library is small and is not accessible to the general public. Technical and general inquiries are answered by a chief forester or referred to other individuals or agencies. There is no charge. *American Forests,* published monthly, may be obtained by subscription.

AMERICAN FOUNDATION FOR THE BLIND, INC.

15 West 16th Street
New York, N.Y. 10011
Telephone: 924–0420 (Area code: 212)

The Foundation is a national, nonprofit, consultative, and research agency. With the help of Federal funds it has established the International Research Information Service (IRIS). The functions of IRIS are focused on the maintenance of a descriptor index of basic and applied research and on the preparation of various publications. Areas covered include sensory research; sensory communication; simulation of living systems; human engineering for sensory aids; testing and analysis of technical devices for the visually impaired; sensory prostheses; research and development of visual prostheses; aids, special-purpose, and adapted devices for the severely visually impaired and the deaf-blind; community studies and attitudinal studies of the visually impaired and sighted populations; and statistical and demographic data on visual impairment.

Journals are received in English, Russian, Italian, Spanish, French, and German. Services provided to the research community without charge include literature searches, reference, referral, and consultation services, and translation of pertinent data.

The *Research Bulletin,* published quarterly, is available free to bona fide researchers. Other publications are state-of-the-art reports, special bibliographies, and evaluative reports prepared under contract.

AMERICAN FOUNDATION FOR TROPICAL MEDICINE

551 Fifth Avenue
New York, N.Y. 10017
Telephone: 687–7290 (Area code: 212)

Under the sponsorship of private industry, the National Institutes of Health, and the World Health Organization, the Foundation acquires, classifies, and distributes results of basic research in tropical medicine and diseases carried out at its research laboratories in Harbel and Voinjama, Liberia. Technical questions are referred to members of the Foundation's scientific advisory council at various universities.

The *Annual Report on the Research Activities of the Liberian Institute of the American Foundation for Tropical Medicine* is distributed gratis to interested organizations and individuals.

AMERICAN FOUNDRYMEN'S SOCIETY

Golf and Wolf Roads
Des Plaines, Ill. 60016
Telephone: 824–0181 (Area code: 312)

A technical association with an international membership of over 90 chapters, the Society promotes the exchange of information on research and development activities as they apply to cast metals. Its committees sponsor investigations performed by technical teams in all areas of the foundry industry. A library is maintained covering subjects relating to casting technology, including production and application. Reference service utilizing the books, journals, data, bibliographies, industrial literature, and technical reports of the Society is available. There is also a consulting service.

Transactions of the American Foundrymen's Society is published annually. *Modern Castings* is a primary journal which appears monthly. Nonperiodical publications include data handbooks, bibliographies, and glossaries.

AMERICAN GAS ASSOCIATION

605 Third Avenue
New York, N.Y. 10016
Telephone: 972–5500 (Area code: 212)

The Association's library supplies facts on any phase of the fuel-gas industry, including technology, statistics, economics, and history. It maintains a collection of books, magazines, pamphlets, AGA publications, proceedings of regional, allied, and foreign gas associations, as well as indexes on subjects in the field. Material is drawn from English, Russian, Italian, Spanish, French, and German sources.

Loan, reference, and referral services are available without charge to Association members and those with a serious interest in the gas industry. Reproduction services and the use of film strips, slides, and flip charts are provided at published rates. Staff specialists answer technical questions and provide a consulting service for both individuals and companies as a public service. The library is open to the public.

The *AGA Monthly* is obtainable by subscription. The Association also issues standards and specifications, reports, instruction pamphlets, manuals, data handbooks, and bibliographies. Prices of these publications can be found in the annual *Publications List.*

AMERICAN GEAR MANUFACTURERS ASSOCIATION

1 Thomas Circle, NW.
Washington, D.C. 20005
Telephone: 783–3621 (Area code: 202)

A trade association, AGMA is interested in standardization of design practice, manufacturing procedure, and application of gears, enclosed gear drives, and similar power transmission media; developing and improving accounting practices, trade statistics and promotion; and conducting commercial, industrial, and engineering research. AGMA also creates and maintains standards and classification systems for unassembled coarse- and fine-pitch spur, helical, herringbone gears and racks; bevels, worms, keys, and keyways in shafts; tooth form; cutting tools; strength and durability gear rating; lubrication; gear materials; inspection and measuring methods and nomenclature.

Reports, data, and standards in the collection are available on loan and AGMA standards may be purchased. A monthly *News Digest* is disseminated through controlled distribution.

AMERICAN GENETIC ASSOCIATION

1507 M Street, NW.
Washington, D.C. 20005
Telephone: 265–6252 (Area code: 202)

The Association is a nonprofit scientific and educational corporation organized to foster genetic research and disseminate knowledge of genetics. It serves as a clearinghouse for information on heredity and genetics of plants, animals, and humans. Technical questions are answered without charge. Illustrative photographs and other demonstration materials are available for a fee.

The bimonthly official publication of the Association, *Journal of Heredity,* may be obtained by subscription.

AMERICAN GEOGRAPHICAL SOCIETY

Broadway at 156th Street
New York, N.Y. 10032
Telephone: 234–8100 (Area code: 212)

The AGS library of over 155,000 volumes of books and bound periodicals covers all aspects of world geography: economic, physical, cultural, historical, political, educational, and medical. Literature in related fields, such as geology, glaciology, climatology, population, statistics, travel, and exploration is also represented. English, Russian, Italian, Spanish, French, and German publications are received regularly. The research catalog is classified by region and subject, and the cards for the 1923–61 period have been published in book form by the G. K. Hall Co. Holdings consist of books, periodical articles, pamphlets, and Government documents, as well as clippings and photographs, which are also classified by region and subject. Reference service and limited literature searches are provided free. Photocopying and interlibrary loan services are available.

The Society also has a Map Department with some 282,000 maps and 4,000 atlases issued by the U.S. Government, foreign governments, and commercial map publishers. Holdings provide world coverage of all periods, with emphasis on the 19th and 20th centuries. Included are general reference maps; topographic series; aeronautical and hydrographic charts; oceanographic maps of winds, currents, temperatures, and salinity; and communications, urban survey, soil survey, geological, population, and other special-purpose maps. The collection also contains works on cartographers and on the history and care of maps, as well as cartographic and geographic reference material.

The map catalog is arranged by region, cross-referenced by author-publisher and by 800 subject categories; it includes cards for individual maps appearing in books and periodicals. Other searching aids are an alphabetical file of country and city plans and lists of specific area maps. Reference service is furnished free, and interlibrary loans are made.

Among AGS publications which may be purchased are the *Geographical Review;* the *Atlas of Diseases;* the *Serial Atlas of the Marine Environment;* and *Focus,* a monthly analysis of a specified area. *Current Geographical Publications,* which lists additions to the Society's Research Catalog, is issued 10 times per year and may be obtained on subscription. A list of other Society publications will be sent on request.

AMERICAN GEOLOGICAL INSTITUTE

1444 N Street, NW.
Washington, D.C. 20009
Telephone: 234–2758 (Area code: 202)

AGI is a federation of the major geological and geophysical societies and represents approximately 30,000 members. It is especially concerned with the identification of earth scientists, their work, and their organizations; with education in the earth sciences at both the pre-college and the college level; and with documentation in the earth sciences. Questions within this scope will be answered without charge.

Activities of the Institute are reported in *Geotimes,* available nine times a year to members and to others by subscription. Several other periodicals may also be obtained by subscription: *Geoscience Abstracts,* which provides monthly coverage of literature about North American geology and includes a monthly author index and annual subject and author index; *International Geology Review,* a monthly journal of selected articles translated from Russian and other foreign publications, which includes reviews of foreign-language books and lists by title all recent translations into English; and *Doklady of the Academy of Sciences, USSR, Earth Science Section,* a translation from the *Doklady Akademii nauk SSSR,* which is issued six times a year.

The 1964 edition of the *Directory of Geoscience Departments,* which may be purchased, lists the names, addresses, and telephone numbers of the departments in all U.S. and Canadian colleges and universities that grant degrees in geology, geophysics, and oceanography. A list of AGI publications is available free on request.

AMERICAN HEART ASSOCIATION

44 East 23d Street
New York, N.Y. 10010
Telephone: 477–9170 (Area code: 212)

A national voluntary health agency, the American Heart Association has affiliated State or regional associations and local chapters in all parts of the United States. Its national office in New York serves as a clearinghouse for the exchange of experience and information on all aspects of cardiology and cardiovascular diseases, including clinical cardiology, hypertension, congenital heart disease, arteriosclerosis, cerebrovascular disease, rheumatic fever, heart surgery, and related problems of the cardiovascular system. Programs are also conducted in the fields of cardiovascular nursing and rehabilitation, school and public health, and professional and public education.

The Association maintains a selected library of about 2,000 volumes and 200 periodicals in support of its program and activities. Its facilities may be used by writers and other professional persons seeking background material in special fields. In response to requests for information on a specific subject, the library generally supplies a short list of pertinent references. It indexes its collection of periodicals with a view to making selected references in the cardiovascular field more readily accessible.

The Association also maintains a separate film library from which films and slides may be rented at nominal fees; occasionally loans are made through local chapters. A catalog of films and other educational materials, such as pamphlets, is available on request.

Several journals and periodicals are published. These include *Circulation,* a monthly scientific journal which publishes major studies in applied research and is directed to the cardiologist and internist; *Circulation Research,* also a monthly journal, devoted to basic research; *Modern Concepts of Cardiovascular Disease,* a bulletin for physicians issued monthly, each issue containing a review of recent developments related to a specific cardiovascular subject; and *The Heart Bulletin,* a bimonthly directed to the general practitioner, sponsored jointly with the American Academy of General Practice and the National Heart Institute. All these publications are obtainable by subscription. For the general reader, two quarterly periodicals, the *Heart Research Newsletter* and the *American Heart,* are available without charge.

AMERICAN HELICOPTER SOCIETY, INC.

141 East 44th Street
New York, N.Y. 10017
Telephone: 697–5168 (Area code: 212)

The Society provides technical information on helicopters and VTOL/STOL aircraft. Journals and reports are available for on-site reference use; in special cases, loans are made. Questions are answered free.

Subscriptions may be obtained to the quarterly *Journal of the American Helicopter Society* and the monthly *Verti-Flite* magazine.

AMERICAN HORTICULTURAL SOCIETY, INC.

1600 Bladensburg Road, NE.
Washington, D.C. 20002
Telephone: 399–1166 (Area code: 202)

The Society is a nonprofit organization which maintains a library and provides information on horticulture, including ornamental gardening, grasses, vegetables, fruits, flower arranging, and agriculture. Technical inquiries are answered in most cases by referral to members of the Society. Services are free.

Gardener's Forum, issued eight times a year, and the quarterly *American Horticulture Magazine* are included in the benefits of membership. Individual copies and reprints may be purchased.

AMERICAN HOSPITAL ASSOCIATION

840 North Lake Shore Drive
Chicago, Ill. 60611
Telephone: 944–4350 (Area code: 312)

The Association establishes standards for hospitals and provides member institutions with guidance on all aspects of the organization, planning, administration, and operation of hospitals and related facilities.

A collection of hospital literature, consisting of some 20,000 bound volumes and 100,000 indexed articles is maintained by the Association in its Asa S. Bacon Memorial Library. All major languages are represented. The Association also has an expanding film library.

Information services available to member institutions include loan of literature, rental of filmstrips and slides, and assistance by staff specialists on specific problems. Catalogs of the manuals, guides, special research reports, and journals published by the Association are available without charge. The following are among publications issued regularly: *Hospital Literature Index,* issued quarterly, with annual and 5-year cumulative indexes; and a special *Guide Issue* of *Hospitals, Journal of the American Hospital Association,* issued August 1 each year and containing a directory of hospitals and hospital statistics.

AMERICAN HOT DIP GALVANIZERS ASSOCIATION, INC.

5225 Manning Place, NW.
Washington, D.C. 20016
Telephone: 362–5655 (Area code: 202)

The Association generates, compiles, and distributes information on the hot-dip galvanizing of ferrous products after fabrication, including technical and practical application of all materials and equipment used in the process. The information is primarily for the use of Association members. However, some published material is for general distribution.

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION

14125 Prevost
Detroit, Mich. 48233
Telephone: 836–0058 (Area code: 313)

AIHA is a professional society of industrial hygienists organized to promote the study and control of environmental factors affecting the health and well-being of industrial workers. It has special committees on aerospace, air pollution, analytical chemistry, biochemical assays, contaminent control ventilation, engineering, hygienic guides, ergonomics, noise, radiation, respiratory protective equipment, toxicology, and technical publications.

The Association answers questions without charge. Employment, consulting, and referral services are also available.

Publications that may be purchased are the *Air Pollution Manual, Part I,* the *Hygienic Guides Series,* and the *Respiratory Protective Devices Manual.* The *American Industrial Hygiene Association Journal,* issued six times a year, is obtainable on subscription.

THE AMERICAN INSTITUTE OF ARCHITECTS

The Octagon
1735 New York Avenue, NW.
Washington, D.C. 20006
Telephone: 393–7050 (Area code: 202)

The AIA library maintains a collection of books and periodicals totaling some 13,000 volumes. American architecture is emphasized, and there is considerable material on the subjects of urban planning, building, and landscape architecture. The library handles the distribution of films produced by the AIA and also has a small slide collection, mainly of American buildings. Many current foreign architectural periodicals are available.

The library is open to the public for reference. General inquiries are answered, but no extended research is possible. Bibliographies are prepared for members. Limited interlibrary loans are available.

Periodicals issued by the Institute obtainable on subscription include the monthly *Journal of the American Institute of Architects* and the biweekly *AIA Memo.* The quarterly *Library Accession List* is distributed to AIA corporate members only. Other publications of the Institute, some of which are available to nonmembers, include *Architects' Handbook of Professional Practice,* contract documents; specifications; technical reports; and pamphlets.

AMERICAN INSTITUTE OF HOMEOPATHY

1011 Arch Street
Philadelphia, Pa. 19107
Telephone: 627–3997 (Area code: 215)

In addition to its other activities, the Institute acts as a clearinghouse for information on homeopathy. Books, journals, reports, data, and nonprinted material are collected on such aspects of homeopathic therapeutics as the simile principle in therapy, the use of ultramolecular dynamizations, healthy human pharmacology, and psychosomatic individualization. Foreign literature includes material in Russian, Italian, Spanish, French, and German.

The Institute provides consulting, reference, translating, and document services; there are no restrictions. Two periodicals are published: the *Journal of the American Institute of Homeopathy,* issued six times a year to members; and the *Index Medicus Homeopathicus Cumulativus,* issued from time to time and available for purchase.

AMERICAN INSTITUTE OF THE HISTORY OF PHARMACY

353 Pharmacy Building
Madison, Wis. 53706
Telephone: 262–2894 (Area code: 608)

The Institute has a bibliographic and vertical-file collection on the history of drugs and the preparation of drugs, particularly in the Western World since the Middle Ages. Professional, scientific, technological, commercial, and sociological aspects are included. English, French, German, and Spanish sources are emphasized.

Reference and document services are available to members without charge and to others at cost. Literature search and advisory services are limited and dependent upon the individual request.

AMERICAN INSTITUTE OF LAUNDERING

Doris Avenue and South Chicago Street
Joliet, Ill. 60433
Telephone: 727–4501 (Area code: 815)

The Institute is a trade association which does laboratory testing for textile manufacturers, operates a school of laundry management, and provides an information service. It has a literature collection of books, journals, reports, films, data, and nonprinted material on professional laundry operation and management and on laundering properties of washable textiles.

A consulting service is offered free of charge to members of the Association. Requests from educational, Government, and other groups are considered individually.

AMERICAN INSTITUTE OF PHYSICS

335 East 45th Street
New York, N.Y. 10017
Telephone: 685–1940 (Area code: 212)

The AIP is a federation of leading societies in the field of physics: the American Physical Society, the Optical Society of America, the Acoustical Society of America, the American Society of Physics Teachers, and the Society of Rheology. The American Astronomical Society and the American Crystallographic Association are associate members.

The Niels Bohr Library of the History of Physics, located in the AIP headquarters building, is devoted to biographies and autobiographies, histories, collected reference works, and other materials related to the history of physics. Covered are historical aspects of such subject areas as astronomy, plasma physics, quantum mechanics, optics, mathematics, instruments, metrology, cosmology, education, and teaching. The collection includes treatises and texts published in the 18th, 19th, and early 20th centuries, works on the philosophy of science, and science in relation to society. Students and teachers of physics, textbook writers, historians, and others interested in the history of physics may use the collection on the premises. Limited interlibrary loan and copying services are available.

In addition, the Niels Bohr Library exhibits and has available to it material from the historical archives of the AIP's Project on the History of Recent Physics in the United States. Documents being collected through the project and placed in the historical archives consist of original notebooks, manuscripts, letters, autobiographies, and photographs of many prominent physicists. Arrangements to use documents from the historical archives can be made upon written application to the Director, Project on the History of Recent Physics in the United States, American Institute of Physics.

The public information center of the Institute's public relations department concerns itself primarily with the distribution of booklets published by the AIP. Its activities do not include reference or consulting services; inquirers seeking information on a given subject are referred to public libraries or to physicists able to supply the needed material.

AMERICAN IRON AND STEEL INSTITUTE

150 East 42d Street
New York, N.Y. 10017
Telephone: 697–5900 (Area code: 212)

A trade and technical association for iron and steel producers, the Institute is composed of committees and departments which review and evaluate problems confronting the industry and compile data from which standards and specifications may be promulgated by standards writing institutions. Information services are provided by the Institute's library, which collects books, reports, and journals on all phases of iron and steel technology, including operations, raw materials, major steel products, metallurgy, economic data, statistics, fire protection, industrial health and hygiene, safety, and plant structures and facilities. There are special historical collections of early iron and steel journals and pictures of the remains of early American furnaces.

The Institute provides consulting, reference, and bibliographical services free for members. For nonmembers, in-person and telephone queries should be directed to the Science and Technology Division of the New York Public Library, which has a complete set of AISI publications for on-site reference. Efforts are made to answer mail inquiries from nonmembers.

Among the publications prepared by the Institute are the *Annual Statistical Report; Yearbook of the American Iron and Steel Institute; Regional Technical Meetings of American Iron and Steel Institute; Directory of Iron and Steel Works of the United States and Canada,* issued periodically; *Steel Products Manual,* issued in separate sections arranged according to basic steel products; *Foreign Trade Trends—Iron and Steel;* and *Charting Steel's Progress.* All are available for purchase. Distributed free of charge are *Contributions to the Metallurgy of Steel,* and *Steel Facts* and *Steelways,* both published five times a year.

AMERICAN MATHEMATICAL SOCIETY

190 Hope Street
Providence, R.I. 02906
Telephone: 521–1113 (Area code: 401)

The Society holds national and regional meetings at which original research papers are presented, publishes books and journals in pure and applied mathematics, maintains the mathematical sciences section of the National Register of Scientific and Technical Personnel, and cosponsors an employment register.

The following Society publications are available on subscription: *Mathematical Reviews,* a monthly publication containing abstracts and reviews of the current mathematical literature of the world; *Bulletin,* the bimonthly official organ of the Society; *Proceedings,* a bimonthly publication devoted to short research papers; *Transactions,* a monthly journal containing longer research papers; *Mathematics of Computation,* a quarterly journal of mathematical tables and other aids to computation; *Doklady,* a bimonthly translation journal covering the mathematics section of the Russian *Doklady Akademiia Nauk SSSR; Acta,* a translation of the journal *Acta Mathematica Sinica;* and *Notices,* issued seven times a year and containing announcements of meetings and abstracts of papers to be presented.

AMERICAN MENTAL HEALTH FOUNDATION, INC.

2 East 86th Street
New York, N.Y. 10028
Telephone: 737–9027 (Area code: 212)

The Foundation, affiliated with the International Institute for Mental Health Research in Zurich and the World Federation for Mental Health in London, is an organization dedicated to research in psychiatry, psychoanalysis, and psychotherapy and to reforms in the field of mental health. The results of its research are disseminated to clinics, hospitals, universities, social agencies, and members of the mental health professions.

The Foundation's research is in testing and establishing fundamental tenets of psychotherapeutic theory and technique. Special projects include the effects of childhood experience on adult personality, evaluation of psychiatric and psychotherapeutic methods, correlation of personality structure and dreams, theories and techniques of the various forms of group psychotherapy, and criminology and related subjects.

Data are derived from clinical studies undertaken by research staff members. Research findings are also published in technical reports and monographs. Examples include: *Introduction to Psychoanalytic Group Therapy,* a text on basic principles and procedures; *Follow-Up Study of Persons Seeking Treatment,* published biennially; and *The Practice of Mental Health Groups. Increased Effectiveness in Psychoanalysis Translated into a Low-Cost, Intensive Treatment Method.*

The organization offers general information services to the public, and refers inquirers to treatment facilities, testing centers, and educational institutions.

AMERICAN METAL STAMPING ASSOCIATION

3673 Lee Road
Cleveland, Ohio 44120
Telephone: 751–8855 (Area code: 216)

This trade association disseminates information on metal stamping and related areas. Its library, a collection of journals, reports, books and technical data, is available to the public without restrictions. Consulting and reference services are provided free to members.

The two annual publications of the Association, *Technical Meeting Transcript* and *Stamping Guide,* may be purchased. *Metal Stamper* is distributed to Association members.

AMERICAN METEOROLOGICAL SOCIETY

45 Beacon Street
Boston, Mass. 02108
Telephone: 227–2425 (Area code: 617)

The Society disseminates information on all phases and applications of meteorology: atmospheric structure; dynamics; radiation; cloud physics; chemistry; electrical properties; interaction with the oceans; extension to the interplanetary plasma; upper atmosphere phenomena produced by solar activities, including aurorae, airglow, and ionospheric absorption; atmospheric effects of magnetically trapped particles; origin and evolution of planetary atmospheres; short and long-range weather prediction; climatology; atmospheric pollution; weather modification; hydrometeorology; and bioclimatology. Technical questions are answered and referrals made free. Reference service is not provided.

Meteorological and Geoastrophysical Abstracts, available by subscription, consists of abstracts of journal articles from 100 countries in all major languages. Subjects covered are meteorology, climatology, oceanography, hydrology, and astrophysics of the solar system. Back issues may be purchased.

The Society also publishes the following periodicals which may be obtained on subscription: *Journal of the Atmospheric Sciences,* bimonthly; *Journal of Applied Meteorology,* quarterly; *Weatherwise,* bimonthly; *Bulletin of the AMS,* monthly; and *Meteorological Monographs,* irregular. A list of books for sale by the Society is available on request.

AMERICAN MUSEUM OF NATURAL HISTORY

Central Park West at 79th Street
New York, N.Y. 10024
Telephone: 873–1300 (Area code: 212)

Through the explorations it sponsors, the Museum brings together collections from all over the world. Aspects of natural history represented in its exhibitions include the work of the Museum's scientific departments. These are: animal behavior, anthropology, astronomy, entomology, fossil invertebrates, herpetology, ichthyology, living invertebrates, mammalogy, micropaleontology, mineralogy, ornithology, and vertebrate paleontology.

The general library is devoted to works on natural science, exploration, and travel. Pertinent American and foreign periodicals are included in the collection, as well as all representative and standard works. Language coverage includes English, Russian, Italian, Spanish, French, and German. Bibliographic aid is given and specific questions answered as time permits; technical questions are referred to specialists in scientific departments. There are no loans except through interlibrary loan. A photocopying service is available. The library is open to the public for research purposes.

There are also several special libraries within the Museum. The collection on vertebrate paleontology forms the Osborn Library of Vertebrate Paleontology. It is not open to the general public, but may be used upon application to the head of the Vertebrate Paleontology Department. The Dean Memorial Library is open to professional ichthyologists and students. The American Museum-Hayden Planetarium Library may be used for reference upon request. The Planetarium shows all the fixed stars visible to the unaided eye from any part of the earth. Its Hall of the Sun contains a 48-foot model of the solar system.

The Museum sponsors several special activities. The Archbold Biological Station at Lake Placid, Fla., conducts such investigations as mimicry studies, parasitology investigations, and research on the behavior of doves. Museum scientists engage in studies in astronomy, ornithology, ecology, ichthyology, mammalogy, and herpetology at the Kalbfleisch Field Research Station at Huntington, Long Island, N.Y. The facilities of the Lerner Marine Laboratory at Bimini, Bahamas, make possible long-term studies of acoustical data of both biological and oceanographic origin, behavioral patterns of teleosts as well as marine mammals, physiologically active substances from marine organisms, and electrophysiological activity in neural tissues. Studies at the Southwestern Research Station, Portal, Ariz., deal with arachnology, botany, entomology, herpetology, ichthyology, malacology, mammalogy, ornithology, and geology.

The publications of the Museum fall into two groups: technical and popular. The technical publications, comprising the *Bulletin of the American Museum of Natural History, Anthropological Papers,* and *American Museum Novitates,* contain information gathered by various expeditions or derived from the study of material in the collections of the Museum. The *Bulletin* contains the larger scientific papers, covering records of exploration and collections of the Museum. The *Anthropological Papers* is devoted to researches in the study of man. The *Novitates* includes shorter scientific contributions, such as description of species, which demand immediate publication. All these publications are distributed to libraries of scientific institutions and societies throughout the world, largely on an exchange basis; they are also on sale.

Popular publications include *Natural History,* the Museum's journal of the natural sciences for adults, and *Nature and Science,* a periodical devoted to science for boys and girls in the 9–14 age groups.

AMERICAN NUCLEAR SOCIETY

244 East Ogden Avenue
Hinsdale, Ill. 60521
Telephone: 325–1991 (Area code: 312)

The Society, an organization of scientists and engineers, promotes the exchange and evaluation of knowledge in all branches of nuclear science and technology, including design of hot laboratories and specialized equipment required for control of radioactive contamination; isotopes and radiation applications in science and industry; reactor mathematics and computations; shielding; materials technology; reactor operations; and nuclear applications to space technology. Referral and consulting services are offered without charge. Photocopies of published material may be purchased.

Nuclear Science and Engineering is published monthly and contains contributed technical articles and some of the papers presented at national meetings. *Transactions of the American Nuclear Society* contains 400 to 600-word summaries, including tables and graphs, of all papers presented at national meetings. *Proceedings of the Conference on Hot Laboratories and Equipment* contains the papers given at the annual Conference on Hot Laboratories and Equipment. *Nuclear News,* an ANS monthly publication, emphasizes the latest general developments in nuclear research and covers industry, news of reactors, contracts and equipment, education, and international news.

AMERICAN OIL CHEMISTS' SOCIETY

35 East Wacker Drive
Chicago, Ill. 60601
Telephone: 782–2455 (Area code: 312)

A professional association with specialized committees engaged in research and collaborative testing, the Society provides an analytical testing service on the chemistry and technology of oils, fats, waxes, their constituents and compounds, and allied products. The committees are: bleaching methods, cellulose yield, colors, fat analysis, glycerin analysis, refining, seed and meal analysis, soap and synthetic detergent analysis, spectroscopy, statistical, technical safety, and uniform safety.

The Society annually revises its *Methods of Analysis,* which serves as standards for U.S. and foreign laboratories and forms the basis for the buying and selling of fats, oils, oilseeds, and soap. Standards samples of natural bleaching earth, activated bleaching earth, glycerine, and aluminum moisture dishes are available for sale.

Short Course Manuals, comprising lectures given in Society-sponsored seminars, are also for sale. These lectures deal with such topics as edible oils, drying oils, soaps, detergents, oil mill operations, fatty acids and derivatives, and unit processes.

The Journal of the American Oil Chemists' Society contains an abstract section and is published monthly.

A cumulative *35-year Index* (1917–52) to the Journal and its predecessor publications, as well as a *Decennial Index* (1953–62), is also available for purchase.

AMERICAN OIL CO.

2500 New York Avenue
Whiting, Ind. 46394
Telephone: 659–2700 (Area code: 219)

The library of the Company's research and development department contains books, journals, reports, patents, and data concerning petroleum refining and chemistry, petrochemicals, catalysis, and metal corrosion. Literature in English, Russian, German, French, and Italian is represented. Use of facilities is limited to employees, but interlibrary loan of books and external reports is available to others.

AMERICAN OPTOMETRIC ASSOCIATION

4030 Chouteau Avenue
St. Louis, Mo. 63155
Telephone: 652–1776 (Area code: 314)

1025 Connecticut Avenue NW.
Washington, D.C. 20036
Telephone: 783–4010 (Area code: 202)

A professional society, the AOA has established an information service which collects and disseminates published data on occupational and industrial vision; motorists' vision; highway safety; clinical techniques; contact lenses; orthoptics and visual training; ophthalmic standards; and visual problems of children, adults, and the aged. Reference, referral, and consultation services are provided free of charge.

The monthly *Journal of the American Optometric Association,* which contains an abstracts and a bibliography section, is available on subscription. *AOA News* is distributed monthly to members at no cost. Educational material, such as brochures and charts, is available to interested groups. Copies of articles may be purchased.

AMERICAN ORDNANCE ASSOCIATION

Transportation Building
17th and H Streets NW.
Washington, D.C. 20006
Telephone: 347–7250 (Area code: 202)

The Association fosters industrial and military cooperation in the research, development, and production of all weapons systems. It is concerned with artillery; bomb, warhead, and artillery ammunition; combat and tactical vehicles; electronics; fire control intruments; missiles and astronautics; small arms and small arms ammunition; underwater ordnance; critical components; logistics; materials; packaging; production equipment and techniques; standards and metrology (weights and measures); and technical documentation. A principal function of the Association is to provide voluntary advice to the Armed Forces through technical divisions, sections, and committees on armament subjects, especially weapons research, development, and production engineering. These technical groups are composed of selected members of the Association, who are industrial experts. Association membership is open to American organizations and citizens interested in the advancement of scientific and industrial preparedness and armament readiness.

Reference and consulting services are available only to the U.S. Department of Defense and other Government agencies. Others are referred to various organizations that can supply the information desired.

The bimonthly *Ordnance* reports on the work of the industry and the Armed Forces in developing and producing new weapons and building national preparedness. It also includes *Weapons Technology,* formerly a separate publication, reporting special studies and technological information important to armament programs. A monthly armament newsletter, *The Common Defense,* presents current events as they relate to ordnance progress. Activities of the various technical divisions, sections, and committees are reported bimonthly in *Progress and Readiness. Logistics* contains the results of special studies made by the Logistics Division. These publications are distributed to members and are available to others on subscription.

AMERICAN ORTHOTICS AND PROSTHETICS ASSOCIATION

919 18th Street NW.
Washington, D.C. 20006
Telephone: 296–4160 (Area code: 202)

An information center on orthopedic and prosthetic appliances, the Association collects journals and reports and answers inquiries from the general public, Government agencies, and physicians. Publications issued include the *Orthopedic and Prosthetic Appliance Journal,* issued quarterly and available on subscription; *The Orthotics and Prosthetics Yearbook,* available for purchase; and the *AOPA Almanac,* made available on limited distribution.

AMERICAN PETROLEUM INSTITUTE

Time-Life Building
1271 Avenue of the Americas
New York, N.Y. 10020
Telephone: 586–4200 (Area code: 212)

300 Corrigan Tower Building
Dallas, Tex. 75201
Telephone: 741–6791 (Area code: 214)

1625 K Street NW.
Washington, D.C. 20006
Telephone: 347–2820 (Area code: 202)

A voluntary, nonprofit trade association, the Institute is representative of all branches of the petroleum industry. The major part of its work is conducted through working committees and subcommittees concerned with oil wells and oil field equipment, gas, drilling fluids and practices, petroleum refining, oil storage, waste disposal, pipelines, aviation, lubrication, industrial dermatitis, and safety and fire protection.

The Institute's department of statistics makes available current data on crude oil production, crude oil runs to refineries, stocks and output of major refined products, refinery capacities, and other tabulations, such as semi-monthly statements on liquified petroleum gas and liquified refinery gas production and inventories. The department publishes monthly and annual digests of petroleum statistics from the U.S. Bureau of Mines and prepares the *Weekly Advance News* and the *Weekly Statistical Bulletin.*

The division of science and technology of the API provides staff services for the medical and health research, safety, and standardization committees of the API board of directors and their subcommittees. Among areas of concern are wax, labeling, petroleum food additives, medical problems, liquified petroleum gas, evaporation loss, storage tank venting, petroleum fluids measurement, accident prevention, fire protection, and fundamental research in the fields of occurrence and recovery of petroleum, its composition and properties, static electricity, and weather forecasting. The division also provides liaison between the petroleum industry and committees of a number of other organizations.

API's committee on public affairs is responsible for the production of motion pictures, films for television, and materials for use in schools. It prepares news releases, speeches, pamphlets, and magazine articles and furnishes a wide variety of material for use by individual companies. It provides informational data, including *Petroleum Facts and Figures,* a basic statistical handbook of the industry. Requests for information relating to the petroleum industry should be sent to the attention of this committee.

The Institute's main library is located in its New York office and is open during normal business hours. Its facilities are available to members and nonmembers alike. The library has a collection of books, bound trade and technical periodicals, and pamphlets and papers of historical, economic, statistical, regulatory, and technical data pertaining to petroleum and allied subjects. Reference copies of all API proceedings and publications are available. A collection of oil company publications is also maintained.

Telephone and written inquiries are handled as well as reader service. Interlibrary loan is extended to API members, Special Libraries Association members, and school and university libraries.

Training and orientation films are lent without charge to oil and service companies, drilling contractors, petroleum associations and societies, and educational institutions through the API office in Dallas, Tex.

The *Proceedings* of the American Petroleum Institute and *Drilling and Production Practice* are published annually and are for sale. Subscriptions may be obtained to *API Abstracts of Refining Literature* and *API Abstracts of Refining Patents,* which are published weekly. Classified cards of all abstracts are also available by subscription. A *27-Year Index* of papers sponsored by the Division of Production may be purchased. A *List of Publications and Materials* is complimentary on request.

AMERICAN PHARMACEUTICAL ASSOCIATION

2215 Constitution Avenue NW.
Washington, D.C. 20037
Telephone: 628–4410 (Area code: 202)

The Association is a national professional society of pharmacists, having as its purpose the advancement of public health through the art and science of pharmacy.

The Association analyzes legislation, evaluates economic conditions, compiles special reports, generates publications, and reproduces information of importance to pharmacists. Areas covered are pharmaceutical research; official drugs and drug standards; analytical testing criteria for official drugs; scientific and educational aspects of pharmacy; military, industrial, community, and hospital practice of pharmacy; history and technology of pharmacy; and career information.

A large collection of literature on pharmacy is maintained in the APhA Foundation Library. It deals with the broadest aspects of the science, including pharmaceutical chemistry, pharmacology, pharmacognosy, pharmacy administration, and the economics of pharmacy. Material is drawn primarily from English, Russian, Italian, Spanish, French, and German sources. Data on drugs distributed both in the United States and abroad include nonproprietary name, chemical name and composition, formula, trade name, manufacturer, packaging, dosage form, pharmaceutical use, toxicity, and contraindications. The Library also contains a collection of historical artifacts of pharmacy, and the APhA Archive Collection.

Reference service is available without charge to anyone engaged in research or having a special interest in any aspect of pharmacy. Telephone inquiries may be made; reference questions are answered by mail.

The APhA Foundation also has a Drug Standards Laboratory, which establishes standards and tests for medicinal products selected by the *National Formulary* advisory committees, including verification and development of identity and purity tests, analytical methods, and other specifications for new drugs and their dosage forms. Services are restricted to manufacturers, producers, and distributors of drugs and to research workers in areas of science and technology related to drugs. A fee is charged for drug reference standards. Questions regarding drug standards and analytical procedures are accepted, but drugs are not tested by the Laboratory.

The *National Formulary,* revised every 5 years by the APhA, is available from the J. B. Lippincott Co., Philadelphia, Pa. Publications available by subscription are the *Journal of the American Pharmaceutical Association* and the *Journal of Pharmaceutical Sciences.* The *APhA Newsletter* is distributed biweekly to members only.

AMERICAN PHILOSOPHICAL SOCIETY

105 South Fifth Street
Philadelphia, Pa. 19106
Telephone: 925-9545 (Area code: 215)

The Society's library specializes in early American history, in American Indian studies, and in the history of modern science. In addition to books and journals, there are manuscript holdings of both original papers and microfilm copies. Among these are the papers of such scientists as Benjamin Franklin, Charles Darwin, Thomas Huxley, Franz Boas, and Simon Flexner. The Society's archives, analyzed from 1769 to 1900, throw light on the early history of American science.

On-site reference service is available to anyone without charge, but circulation of materials is limited to members of the Society and interlibrary loan. The *Annual Report* is distributed to libraries as a courtesy.

AMERICAN PHYSICAL THERAPY ASSOCIATION

1790 Broadway
New York, N.Y. 10019
Telephone: 265-0430 (Area code: 212)

The Association's headquarters serves as a center for the dissemination of information on the physical therapy profession and its relationship to education and performance services in the United States and abroad. Journals, reports, films, and data are evaluated and analyzed. English, Spanish, French, and German sources are included.

The collection is available for on-site use; no loans are made. Assistance is provided in screening of professional credentials, placement, identification of physical therapy facilities, and physical therapy literature references. Fees may be charged for screening of credentials; most services are free. Consultation services, for which charges are determined individually, are available to administrators of facilities and educational institutions concerned with physical therapy. Limited photocopying service is provided.

The monthly *Journal of the American Physical Therapy Association* contains articles, reviews, conference proceedings, reports on education for physical therapists, a bibliographic index to current literature, abstracts, and book reviews. It is obtainable by subscription.

AMERICAN PLYWOOD ASSOCIATION

1119 A Street
Tacoma, Wash. 98401
Telephone: 272–2283 (Area code: 206)

The Association is the trade promotion, quality control, and engineering research organization for manufacturers of western softwood and southern pine plywood. It provides information on the basic properties of plywood, such as strength and stiffness, vapor transmission, thermal insulation, preservative and fire-retardant treatment, and use of fasteners in plywood; on structural application of plywood in glued assemblies, such as stressed-skin panels, built-up beams, trusses, and sandwich panels; and recommended use of plywood for shear walls, diaphragm floors and roofs, concrete forms, highway signs, and highly engineered shell structures. Information is applicable only to softwood produced commercially in the United States in accordance with U.S. Commercial Standards CS 45, CS 122, and CS 259.

Technical publications issued by the Association are available without charge to all having access to U.S. Commercial Standard Softwood Plywood. A publications list is obtainable on request.

AMERICAN PSYCHIATRIC ASSOCIATION

1700 18th Street NW.
Washington, D.C. 20009
Telephone: 232–7878 (Area code: 202)

A medical society whose membership includes psychiatrists from the United States, Canada, Central America, and the Caribbean nations, APA includes among its activities assistance to State governments in conducting surveys of mental health resources and needs; inspection and rating of public and private mental hospitals; administration of special study and conference projects; and operation of the APA Mental Hospital Service. The Association maintains a library, a publishing activity, a scientific information service, and a public information office. Material is available on all aspects of current developments in psychiatry and related disciplines, such as psychology, psychoanalysis, clinical psychology, psychosomatic medicine, mental hospitals, nursing, and social work. There is an extensive reference collection on the history of psychiatry.

Reference service is available without charge. Pamphlets and other documents are distributed in answer to recurring questions. In reply to some inquiries, referral is made to other organizations and individuals. There are no restrictions on access to information for scientists in related fields. Services for others are limited according to time and effort required. Photocopies of material may be purchased.

Facts and figures about psychiatry are compiled and disseminated through the joint information service, largely by means of original surveys, brief literature searches, and correspondence, utilizing the part-time services of medical staff specialists. This service is operated in collaboration with the National Association of Mental Health.

Two journals, the *American Journal of Psychiatry* and *Mental Hospitals,* appear monthly. Other publications are the *APA Newsletter,* also a monthly; *Psychiatric Research Reports,* a series; and books, monographs, and other reports. A list of publications is available free on request.

AMERICAN PULPWOOD ASSOCIATION

605 Third Avenue
New York, N.Y. 10016
Telephone: 687–2272 (Area code: 212)

A trade association, APA has five major programs which serve the pulpwood industry in technical, safety and training, statistical, forest management, and legislative areas through publications, regional and national meetings, and cooperative research. It maintains close relations with the U.S. Forest Service and other Government agencies.

Although the Association does not maintain a formal library, it disseminates information on pulpwood growing, harvesting, logging, transportation, storage, and utilization; legislation; safety and training; statistics on pulpwood receipts, consumption, and inventories; forest management; and conservation. Technical and general questions are answered and appropriate publications and photocopies furnished along with the replies. Staff forest engineers provide consultations for members and subscribers. The type and extent of response to requests from others depends on the inquirer, with preferential service given to persons in forest industry, forestry education, and related fields.

The *Pulpwood Annual* and *APA Quarterly* are for sale. A price list of other publications, including technical releases and papers, legislative bulletins, statistical reviews, training guides, film directory, and pamphlets, is available on request.

AMERICAN SCIENCE INFORMATION INSTITUTE

Mail:
P.O. Box 696
Detroit, Mich. 48231

Location:
1026 David Stott Building
1150 Griswold Street
Detroit, Mich.
Telephone: 961–5944 (Area code: 313)

A commercial institution, ASII designs science information programs to serve individual needs. For a fee, the Institute prepares state-of-the-art reviews based on international literature in specific fields; provides abstracts, bibliographies, and translations; and furnishes foreign language instructors, conference interpreters, multilingual science editors, and illustrators.

The Institute has organized a technical and scientific library of reference material in English, Russian, German, French, and 34 other languages, including many specialized dictionaries in European and Oriental languages. Scientific periodicals from the Soviet Union and from central and eastern Europe form an important part of the collection.

AMERICAN SCIENTIFIC GLASSBLOWERS SOCIETY

309 Georgetown Avenue, Gwinhurst
Wilmington, Del. 19809
Telephone: 798–3362 (Area code: 302)

The function of this technical society is the gathering and dissemination of knowledge concerning the art of scientific glassblowing and related apparatus, equipment, and materials. It sponsors discussions of problems and methods of construction and cooperates in educational programs for the profession.

The Society answers questions without charge. All inquiries involving technique are referred to its methods and materials committee; other questions are referred to the appropriate committees.

Fusion, published quarterly, contains technical articles and is included in membership. It may also be obtained by subscription. *Proceedings* of the annual symposiums, distributed free to paid registrants, may be purchased.

AMERICAN SHORE AND BEACH PRESERVATION ASSOCIATION

810 18th Street NW.
Washington, D.C. 20006
Telephone: 393–4297 (Area code: 202)

A nonprofit, private organization, ASBP is concerned with the preservation of the Nation's coastal resources. It endeavors to combine the efforts of public and private agencies and industrial and private individuals in the preservation and wise development of shores and beaches. It provides correlation and exchange of scientific, engineering, and educational knowledge in this field and encourages legislation at local, State, and Federal levels. Reference service is available to members and non-members, to the latter at a nominal fee. The Association maintains a directory of consulting services for coastal engineering.

Shore and Beach, the annual publication of ASBP, and *Monthly News Letter* are furnished all members. Both may be obtained by private or public libraries through subscription.

AMERICAN SOCIETY FOR METALS

Metals Park, Ohio
Telephone: 338–5151 (Area code: 216) TWX: RUS 0 566

The Society maintains a service for electronic machine searching of the world's metals engineering and scientific literature, including U.S. Government reports and metallurgical patents. The scope ranges from ores and concentrates to heat treating and fabricating; from nonmetallic materials similar to metals in nature and properties to solid-state physics, mechanical engineering, electrical engineering, inorganic chemistry, and nuclear engineering as related to metals. Articles about metals from the world's leading magazines are coded; languages represented include English, French, German, Russian, Chinese, Japanese, Italian, Spanish, Portuguese, Finnish, Yugoslav, Czech, Swedish, Norwegian, Dutch, Greek, Hungarian, and Rumanian.

Current awareness searches, available by subscription, provide information in the form of abstracts on any subject related to metals. Photocopies of the complete documents from which the abstracts are taken may be purchased. Retrospective bibliographic searches of previous literature in the field are prepared on demand. This service utilizes machine searching for 1958 to date, with cost varying with time coverage. Conventional library searches occasionally are performed when staff time is available; cost varies with complexity and time coverage. *World Information Files,* consisting of complete searches from 1960 through 1962 of 12 popular metals subjects, may be purchased.

About 30,000 documents per year are abstracted. Of these, 12,000 items, representing literature references in the core of metallurgical subject matter are published annually in the *Review of Metal Literature,* ASM's monthly abstract journal, which is available on subscription and sold in the form of an annual volume.

The *ASM Transactions Quarterly* is devoted to scientific, research, and development papers. Technical papers of a practical nature make up the *Metals Engineering Quarterly. Metal Progress,* issued monthly, concentrates editorially on the latest information available on materials and processing and directs it to an engineering audience. *Metals Review,* also a monthly, is the news magazine for the members of ASM. All are available on subscription.

AMERICAN SOCIETY FOR QUALITY CONTROL, INC.

161 West Wisconsin Avenue
Milwaukee, Wis. 53203
Telephone: 272-3347 (Area code: 414)

The Society's library maintains a file of literature published by the ASQC on quality control; industrial processing research; application of quality control in aircraft and missile automotives; chemical electronics; and textile, food, primary metals, and metalworking industries.

Answers to technical questions are provided to the public without charge. Questions that cannot be answered at Society headquarters are referred to members with specialized knowledge.

Industrial Quality Control, which appears monthly, and the *Journal of the Electronics Division, ASQC,* issued quarterly, may be purchased.

AMERICAN SOCIETY FOR TESTING AND MATERIALS

1916 Race Street
Philadelphia, Pa. 19104
Telephone: 563-5315 (Area code: 215)

A national, nonprofit technical, scientific, and educational society, ASTM centers its activities on research and standardization of specifications and methods of testing materials. Its work is accomplished largely by some 90 main technical committees, which are responsible for the collection of data, the initiation and correlation of research, and the development of standard specifications and test methods. ASTM cooperates closely with technical and engineering societies, trade associations, and Government agencies. Fields covered include ferrous and nonferrous metals, cement, lime, gypsum, mortar, concrete, mineral aggregates, bituminous materials, soils, asbestos-cement products, masonry units, pipe and drain tile, refractories, ceramic whitewares, porcelain enamel, glass, building stone, thermal insulation, acoustical materials, paper and packaging, adhesives, wood, cellulose, casein, leather, petroleum products and lubricants, paint, naval stores, coal and coke, gaseous fuels, industrial aromatic hydrocarbons, industrial chemicals, plastics, carbon black, textiles, soap, sorptive mineral materials, organic solvents, industrial water, wax polishes, rubber, and electrical insulation.

Technical and scientific data and some journals are acquired. A standards and specifications service provides free reference and referral assistance.

ASTM has an extensive publications program. *Materials Research and Standards,* a monthly magazine, contains technical papers and reports, news of the Society's activities and members, and articles on research projects and standardization. The *Book of ASTM Standards,* consisting of 32 parts, is published annually. The *ASTM Index to Standards* is also issued annually. *ASTM Proceedings* is an official record of the Society's yearly activities. Special technical publications containing symposia, papers, and reports on research, development, and standardization in various materials fields are available. The *Yearbook* contains a list of members, committee personnel, and other pertinent information. A *Fifty-Year Index to ASTM Technical Papers and Reports (1898–1950)* and two *Five-Year Indexes* (1951–55 and 1956–60) have been issued. All publications are for sale to the public, and a complete list of those available will be sent free upon request.

ASTM prepares and distributes a punched card index system developed at Wyandotte Chemicals Corporation for searching and correlating infrared, ultraviolet, and visible spectral absorption data and chemical structure. Data from worldwide published sources are coded and indexed on cards for use with sorters, or the data may be transferred to tape for use with computers. *Molecular Formula-Name Index Cards* for compounds whose infrared, ultraviolet, or visible spectral absorption data have been indexed by the punched card system are also prepared. These cards are punched and printed to indicate the molecular formulae, chemical names, and spectrum serial numbers. Complete decks and supplements of punched cards bearing spectral data or molecular formula names are sold by ASTM on request. Special decks of spectral data cards prepared to customer specifications according to one or more of the variables punched into the cards are also available for purchase; inquiries should be directed to Wyandotte-ASTM Punched Card Project, Wyandotte Chemicals Corporation, Wyandotte, Michigan. A listing of several related publications derived from the project is available from ASTM on request.

ASTM is also responsible for the distribution of the *Powder Diffraction Data File* and the *Crystal Data* (*Determination Tables*) compiled by the Joint Committee on Chemical Analysis by Powder Diffraction Methods under the joint auspices of ASTM, the American Crystallographic Association, the British Institute of Physics, and the National Association of Corrosion Engineers.

The *Powder Diffraction Data File* is used for the identification of phases from diffraction data, either X-ray or electron, that have been obtained from a powder. It consists of 13 sections of primary data cards listing the strongest lines and intensities for approximately 10,000 patterns. The *File* is issued in the form of 3 x 5 cards; five types of indexes are available.

Crystal Data (*Determination Tables*) is a compilation of cell dimensions and other physical properties used for the identification of phases by single crystal methods. The *Tables*, consisting of about 13,000 entries with formula and name indexes, are published in a single volume by the Polycrystal Book Service, General Post Office Box 620, Brooklyn, N.Y.

AMERICAN SOCIETY OF AGRONOMY

677 South Segoe Road
Madison, Wis. 43711
Telephone: 238–4222 (Area code: 608)

1102 16th Street, NW.
Washington, D.C. 20006
Telephone: 628–1534 (Area code: 202)

A professional society for crop and soil scientists, ASA promotes basic and applied research, makes available new information on crop and soil science, and cooperates with other organizations in the consideration of the management of natural resources. Closely affiliated with the Crop Science Society of America and the Soil Science Society of America, it has divisions dealing with crop breeding, genetics, and cytology; crop physiology and ecology; crop production and management; seed production and technology; turfgrass management; weeds and weed control; soil physics; soil chemistry; soil microbiology; soil fertility, fertilizers, and plant nutrition; fertilizer technology and use; soil genesis, morphology, and classification; soil and water management and conservation; forest and range soils; agronomic education; land use and management; and climatology.

The Society answers technical questions directly when possible. If the information sought is not available, the problem is referred to others. Fees and time limitations are decided individually, but are seldom imposed. The Public Responsibility Committee of ASA serves as an immediate contact source in Washintgon, D.C.

Published bimonthly, the *Agronomy Journal* serves ASA members as the medium for publication of their research. It includes *Agronomy News*, a newsletter. *Crops and Soils* presents the latest advances in crop and soil improvements in popular form. Summaries of papers presented at annual meetings are published in *Agronomy Abstracts*. Nonmember subscription rates are furnished on request. The Society also publishes a monograph series, consisting of comprehensive treatments of specific subjects, and a special publication series which usually consists of symposia on current topics. The affiliated societies publish their own technical journals, *Crop Science* and the *Proceedings of the Soil Science Society of America*.

AMERICAN SOCIETY OF CIVIL ENGINEERS

United Engineering Center
345 East 47th Street
New York, N.Y. 10017
Telephone: 752-6800 (Area code: 212) Cable: CEAS, New York

A professional society, ASCE comprises 15 specialized divisions dealing with aerospace transport, city planning, construction, engineering mechanics, highways, hydraulics, irrigation and drainage, pipelines, power, professional practice, sanitary engineering, soil mechanics and foundations, structural engineering, surveying and mapping, and waterways and harbors.

In handling requests for information, the Society in most cases refers the inquirer to ASCE publications and occasionally provides indexes through which the requester may obtain the desired information. In some cases requests are referred to staff members. There is no charge for these services. Where answers to technical questions require a considerable expenditure of time, the Society refers the inquirer to the Engineering Societies Library, which will provide assistance for a fee.

The 15 *Journals* issued by the divisions of the Society cannot be obtained individually; subscription includes the entire set. *Civil Engineering,* published monthly, is distributed free to members and is available to others by subscription. Other publications include *Transactions of the ASCE,* issued annually; the *Directory,* issued biennially; and manuals and reports of engineering practice.

AMERICAN SOCIETY OF HOSPITAL PHARMACISTS

2215 Constitution Avenue NW.
Washington, D.C. 20037
Telephone: 347-5763 (Area code: 202)

The information services of this society are concerned chiefly with hospital pharmacy practice and, although directed to the needs of the membership, are available to everyone concerned with patient's pharmaceutical needs. Subject areas covered include drug formulation, stability, reactions, storage and assay; pharmacy planning and practices; pharmaceutical technology, equipment, and procedures; history, ethics, education, sociology, and literature of pharmacy; pharmacopoeias; pharmacognosy; and investigational drugs.

Reference and consulting services are offered without charge or restriction. Pertinent literature, data, or referrals are provided as needed.

Among publications which may be obtained by subscription are the *American Hospital Formulary Service,* the biweekly *International Pharmaceutical Abstracts,* which contains abstracts of pharmacy world literature, and the monthly *American Journal of Hospital Pharmacy.*

AMERICAN SOCIETY OF INDUSTRIAL DESIGNERS

15 East 48th Street
New York, N.Y. 10017
Telephone: 753-1818 (Area code: 212)

This professional, nonprofit organization of practicing industrial designers is concerned with all aspects of industrial design, particularly those of product design, industrial and consumer packaging, exhibition design, graphics, and interiors.

The Society's Consultant Designers' Register of data on members is open for inspection to manufacturers' representatives only. Bona fide researchers may inspect historical material pertaining to the Society on the premises. Slides relating to the work of ASID members are available for loan to members and educational institutions. Statistical data on specific subjects are furnished to members.

Nine *ASID Newsletters* are issued yearly and circulated free to a limited number of allied organizations, publications in the field, foreign organizations, and the membership. Educational bulletins and other pamphlets are available by purchase.

AMERICAN SOCIETY OF LUBRICATION ENGINEERS

838 Busse Highway
Park Ridge, Ill. 60068
Telehpone: 825-5536 (Area code: 312)

The Society, a technical engineering organization, is a clearinghouse for information in the field of lubrication. Technical questions are referred to subject specialists on ASLE technical committees or industry councils; there is no charge. The committees include: Lubrication fundamentals; lubrication practices; lubricant reconditioning and disposal, properties of lubricants, seals, and packings; bearings and bearing lubrication; hydraulics and hydraulic machinery; and lubrication equipment. Industry councils include: Aviation, machine tool, marine, mining, mobile equipment, railroads, nonferrous metals, paper, petroleum and chemicals, power, steel, and textile.

Lubrication Engineering appears monthly and features practical and technical articles on current lubrication practices, details on new equipment and materials, and reference sections by specialists in the field. *ASLE Transactions* contains information on theoretical subjects of a fundamental nature and serves as a reference work on lubrication problems.

AMERICAN SOCIETY OF SANITARY ENGINEERING

228 Standard Building
Cleveland, Ohio 44113
Telephone: 771-6677 (Area code: 216)

The Society is a scientific and technical group concerned with the fields of mechanical sanitation, plumbing, gas and water supplies, plumbing drainage, inspection, plumbing and sanitation codes, research and design, testing and experimentation, manufacture, and health as related to sanitation. It provides free referral and reference services.

The *Yearbook of the American Society of Sanitary Engineering* contains information on health, plumbing, and sanitation as reported at annual meetings. The monthly *ASSE Newsletter* relates current activities of the various chapters and the national organization, and contains articles by authorities in the field. Both publications are distributed to members without charge.

AMERICAN SOCIETY OF SUGAR BEET TECHNOLOGISTS

156 South College Street
Fort Collins, Colo.
Telephone: 482-8509 (Area code: 303)

The Society acts as a clearinghouse for information on production and processing of sugar beets and research related to the beet sugar industry. It maintains a collection of journals and reports, including foreign literature and data exchanged with Germany, Sweden, England, the Netherlands, Belgium, Denmark, and Israel on all aspects of sugar beet technology. Subjects covered include agronomy, genetics in terms of variety improvements, entomology, plant pathology, agricultural engineering, beet sugar chemistry, and production of beet sugar.

The Society answers technical questions; refers some inquiries to member specialists; makes available unpublished data in the Society's files; and provides loans and photocopies of documents on request. For volume orders there is a nominal charge. The *Journal of the American Society of Sugar Beet Technologists,* issued quarterly, is available on subscription.

AMERICAN SOCIETY OF TOOL & MANUFACTURING ENGINEERS

10700 Puritan Avenue
Detroit, Mich. 48238
Telephone: 864-7300 (Area code: 313)

A professional society with an international membership, ASTME is an affiliate of the American Association for the Advancement of Science and the Engineers Joint Council. It is concerned with all aspects of the design and manufacture of tools and manufacturing aids and the planning of manufacturing processes, and provides grants for research and education in the field. Working closely with the American Standards Association, it also assists in developing standards for tools and manufacturing engineering.

The Society's library, containing books, journals, reports, and data, is open to anyone for reference use. Professional engineers on the staff will hold brief consultations without charge, but no research is performed. Photocopies are provided for a charge which depends upon the length of the text.

A list of technical books prepared by the Society and published commercially is available on request. Other ASTME publications are the monthly *Tool and Manufacturing Engineer,* which is available on subscription; *TME Data Information Service,* a quarterly, which is distributed free to members; and *News for Metalworking Executives,* which appears irregularly and is distributed free to members.

AMERICAN SPEECH AND HEARING ASSOCIATION

1001 Connecticut Avenue
Washington, D.C. 20036
Telephone: 347-7317 (Area code: 202)

A scientific and professional society, the American Speech and Hearing Association is concerned with the nature, processes, and disorders of speech, hearing, and language. Specific subject interests are anatomy and physiology, auditory skills and training, psychoacoustics, audiometry, auditory feedback, hearing aids, phonetics, semantics, voice, aphasia, cerebral palsy, cleft palates, delayed speech, laryngectomy, and stuttering.

Technical questions are answered, and the following publications are available for purchase: *DSH Abstracts,* prepared in coöperation with Gallaudet College, *Journal of Speech and Hearing Disorders,* and *Journal of Speech and Hearing Research* all of which are issued quarterly; *ASHA Monographs,* published irregularly; and *ASHA,* a monthly news journal.

AMERICAN STANDARDS ASSOCIATION

10 East 40th Street
New York, N.Y. 10016
Telephone: 683-3058 (Area code: 212)

A federation of technical societies, trade associations, and consumer organizations, ASA serves as a clearinghouse and coordinating agency for the establishment of a uniform set of national standards on all subjects for which standards exist or may be prepared nationally or internationally.

Standards material is received and maintained in the ASA library from the 50 members of the International Organization for Standardization, of which ASA is the member for the United States, and from the International Electrotechnical Commission. These foreign standards are in English, Russian, French, German, Spanish, Italian, and other languages.

Standards are published, normally in English only, under the designation "American Standard." Periodicals issued by ASA include *The Magazine of Standards,* a monthly publication available on subscription; the *Catalogue of American Standards,* distributed yearly at no cost; and the annual *Proceedings of the National Conference on Standards.*

AMERICAN UNIVERSITY

Center for Technology and Administration

1901 F Street NW.
Washington, D.C. 20016
Telephone: 783-4940 (Area code: 202)

The program of the Center includes information processing, storage, and retrieval; automation; automatic data processing systems; and research and development administration. The Center's laboratory is equipped with electronic computers for both scientific and business data processing. Books, reports, and tearsheets in these fields are acquired and made available for use on the premises. Reference service is provided on a limited basis.

AMERICAN WELDING SOCIETY

345 East 47th Street
New York, N.Y. 10017
Telephone: 752-6800 (Area code: 212)

The technical department of the Society maintains a collection of books, reports, journals, industrial literature, data, and technical correspondence on welding and allied subjects: Soldering; brazing; metallizing; resistance welding; field welding of storage tanks and steel water pipe joints; automotive and railway welding; piping and tubing; filler metal; safety recommendations; methods of inspection; standard qualification procedures; building codes; welded bridges; marine construction; symbols, definitions, and charts; equipment and supplies; and training and education.

The department performs literature searches, provides answers to technical questions, furnishes scientific or technical data or data compilations upon request, and sells original or reproduced copies of its holdings. The collection is accessible for direct use by visitors.

The monthly *Welding Journal* and the annual *Welding Handbook* are available for purchase. The Society also issues bibliographies and special reports, as well as publications on recommended practices, standards, codes, and specifications.

AMERICAN ZINC INSTITUTE, INC.

292 Madison Avenue
New York, N.Y. 10017
Telephone: 679-6020 (Area code: 212)

638 New Center Building
Detroit, Mich. 48202
Telephone: 872-2850 (Area code: 313)

324 Ferry Street
Lafayette, Ind. 47901
Telephone: 742-3476

Through contact with the zinc industry, the Institute collects and distributes information on all phases of the domestic production and consumption of zinc and zinc products. This includes technical and application engineering related to the zinc industry, marketing and statistical aspects of zinc production and consumption, galvanizing, diecasting, rolled zinc, zinc oxide, zinc chemicals, building construction, corrosion, cathodic protection, electric cells, toxicity, paints, pigments, plating, coating, alloys, and metallurgy. It excludes price, tariffs, stockpiles, imports, and exports. Research is conducted by the Institute's associated organization at the same address, the International Lead Zinc Research Organization, on a contractual plan.

In addition to books, journals, reports, and data from English, Russian, Italian, Spanish, French, German, Dutch, and Portuguese sources, there are films and photographs in the collection and some nonprinted material. A library which is open to the public and through which interlibrary loans may be arranged is maintained at the New York office. Reference, consulting, and document services are available without charge.

Zinc Spotlight is published quarterly and is free. *Zinc Abstracts,* a free, monthly publication which reviews all current world uses of zinc, is prepared in London at the ZDA/LDA Joint Library, 34 Berkeley Square, under the joint sponsorship of the Zinc Development Association (British), Lead Development Association (British), American Zinc Institute, Lead Industries Association (American), and the International Lead Zinc Research Organization. Each abstract is printed with uniterms. Full indexes are maintained in London to past and present literature; duplicate card indexes of current material are maintained in New York. All requests for loans, photocopies, or translations by readers in the United States should be made directly to the Zinc Development Association in London. The *Annual Review of the Zinc Industry in the United States* is distributed at no cost. The *Proceedings of International Galvanizing Conferences* constitute a special collection at the Institute's New York Library.

Nonperiodic publications include technical reports, indexes, conference proceedings, standards and specifications, data handbooks, directories, and bibliographies.

ANACONDA WIRE & CABLE CO.

605 Third Avenue
New York, N.Y. 10016
Telephone: 867–8000 (Area code: 212)

A manufacturer of electrical conductors for power and communications, the Company performs research to improve its products, establishes standards and specifications, and issues technical publications.

Consulting services on the application of Company products are available, and reprints of technical papers are provided on request.

ANCHORAGE COMMUNITY COLLEGE

1700 Hillcrest Drive
Anchorage, Alaska 99503
Telephone: 322–4942 (Area code: 907)

The College library has a collection on general science at the junior college level. It is also a selective depository for documents published by the U.S. Government Printing Office and is open to the public for on-site reference. Many items of Alaskana are included in the holdings. Interlibrary loan is available.

M. D. ANDERSON HOSPITAL AND TUMOR INSTITUTE, *See* THE UNIVERSITY OF TEXAS

ANIMAL CARE PANEL, INC.

4 East Clinton Street
Joliet, Ill. 60431
Telephone: 727–9120 (Area code: 815)

The Panel is a professional society which promotes the exchange of information within the scientific community on the production, care, and study of animals used in biomedical research. This includes U.S. and foreign techniques, design of animal quarter facilities, anesthesia and restraint, transportation problems, postoperative care, and the introduction of new species. The Panel answers inquiries and makes referrals without charge.

The following publications are issued by the Panel: *Laboratory Animal Care,* bimonthly, available on subscription; and the quarterly *ACP Bulletin,* available without charge. Before 1963, *Laboratory Animal Care* was published as the *Proceedings of the Animal Care Panel,* issued in 12 volumes with a complete author and subject index. The *Proceedings* are for sale, with the exception of volumes 2 and 3.

ANN ARBOR SEISMOGRAPH STATION, *See* UNIVERSITY OF MICHIGAN

ANS ARGONNE CODE CENTER, *See* ARGONNE NATIONAL LABORATORY

ANTHRACITE RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

APPLIED RESEARCH LABORATORIES, INC.

Post Office Box 1710
3717 Park Place
Glendale, Calif. 91205
Telephone: 249–6193 (Area code: 213)

A subsidiary of Bausch and Lomb, Inc., ARL specializes in the manufacture of instruments for use in spectroscopic investigations. Upon request, it will provide information on spectrochemical instruments and methods, particularly optical emission and X-ray fluorescence spectroscopy, and electron microprobe X-ray analysis.

ARL does not attempt to answer technical questions unless submitted by present or potential customers. Consultations in person are possible by advance arrangement. Slides related to ARL equipment and its performance are available on loan.

Single copies of technical papers, pamphlets, and brochures are given out free upon request. Published spectrographic standards and specifications may be purchased. *Spectrographers' Newsletter,* an in-house quarterly, is distributed without charge.

AQUATIC SCIENCES INFORMATION RETRIEVAL CENTER, *See* UNIVERSITY OF RHODE ISLAND

ARCHER-DANIELS-MIDLAND CO.

T. L. Daniels Research Center

10701 Lyndale Avenue South
Minneapolis, Minn. 55420
Telephone: 888–7931 (Area code: 612)

Maintained by the Company primarily for employees, the Center has specialized holdings on glyceride fats, oils, and their derivatives; protective coatings, such as paints, varnishes, and resins; and animal nutrition. Reference and document services are provided. Book, journal, and patent collections are accessible to the public by appointment for on-site reference.

ARCHITECTURAL WOODWORK INSTITUTE

1808 West End Building
Nashville, Tenn. 37203
Telephone: 242–2439 (Area code: 615)

The Institute evaluates, compiles, analyzes, and disseminates information on architectural woodwork; standards and good millwork practice; cost estimates and accounting; and preservative treatment of doors, windows, and plywood panels. Its holdings consist of books, reports, films and photos, data, and published courses in cost estimating, detailing, and billing.

Reference and document services are available free to members, architects, engineers, and specification writers. Material is available on loan to responsible researchers for reference and study.

Millwork News and *Architectural Woodwork* are distributed free. Other publications, available for purchase, include manuals and standards and specifications.

ARCTIC INSTITUTE OF NORTH AMERICA

Arctic Bibliography Project

1619 New Hampshire Avenue NW.
Washington, D.C. 20005
Telephone: 667–1716 (Area code: 202)

Administered by the Arctic Institute and sponsored by American and Canadian Government agencies, the Arctic Bibliography Project searches, abstracts, and indexes world literature in all fields pertaining to arctic and subarctic regions. Russian sources account for almost half of the material covered. Western and northern European languages are also represented. The project maintains no collections of its own, but uses the resources of specialized libraries. Its primary purpose is the publication of the annual *Arctic Bibliography,* which is available for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Reference service is provided, but the extent depends upon the source of the request.

ARGONNE NATIONAL LABORATORY

ANS Argonne Code Center

9700 South Cass Avenue
Argonne, Ill. 60440
Telephone: 739–7711 (Area Code: 312)

Sponsored by the American Nuclear Society, the Code Center was established to meet the needs of the members of the Reactor Mathematics and Computation Division of the Society for a central agency to collect and distribute code abstracts and code package material on digital computer codes in this area of interest and to serve as a source of information on such codes.

Code abstracts are distributed upon publication to members of the Reactor and Computation Division. Other code package material, such as decks, tapes, and documentation must be requested.

ARIES CORP.

939 North Kenmore Street
Arlington, Va. 22201
Telephone: 522–7376 (Area code: 703)

This consulting firm supplies programing, system analysis, and engineering services to computer users. It employs specialists in system design, development, and analysis; programing design and coding; program systems testing of air traffic control and military command and control; information storage, retrieval, and display; and data reduction and integration type systems. Specialization includes design and development of compilers, assemblers, and utility systems; design and codification of the executive control/monitoring routines for large single or multimachine systems; logical and decision-processing routines for large-scale machine systems; and the debugging and making operational of large real-time programs.

Specific fees apply and may be obtained on request.

ARIZONA BUREAU OF MINES, *See* UNIVERSITY OF ARIZONA

ARIZONA COOPERATIVE WILDLIFE RESEARCH UNIT, *See* UNIVERSITY OF ARIZONA

ARMCO STEEL CORP.

Research Center

703 Curtis Street
Middletown, Ohio 45042
Telephone: 425–2194 (Area code: 513)

The Research Center of the Corporation maintains a technical library of books, journals, reports, patents, films, and photos relating to ferrous and nonferrous metallurgy; metallography; analytical, inorganic, and physical chemistry; instrumentation; emission spectroscopy; X-ray analysis; metals technology; and the fabrication of products from metals. English, Russian, German, French, and Japanese sources are used.

Reference, document, and consulting services are provided, but are generally available only to Armco employees. Services to others are limited to local or area companies and are dependent on the availability of time and resources.

ARMED FORCES—NRC COMMITTEE ON VISION, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

ARNOLD ARBORETUM, *See* HARVARD UNIVERSITY

ARTHUR D. LITTLE, INC.

15 Acorn Park
Cambridge, Mass.
Telephone: 864–5770 (Area code: 617)

A commercial consultant firm, Arthur D. Little, Inc. conducts work on a contract basis for Government and industry in all branches of science, technology, and economics, including chemistry and chemical engineering, physics, geology, geophysics, aerospace sciences, biology, mathematics, meteorology, mineralogy, metallurgy, mechanical engineering, industrial technology, market research, area development, operations research, industrial economics, and economic development. Literature in English, Russian, Italian, Spanish, French, and German is represented among its library's holdings.

Reference use of the library by nonclients is decided on an individual basis. A document services group performs a variety of literature and related services at service-time rates.

ASSOCIATED GENERAL CONTRACTORS OF AMERICA

1957 E Street NW.
Washington, D.C. 20006
Telephone: 393–2040 (Area code: 202)

A trade association, AGC is composed of three occupational divisions: A Building Contractors' Division; a Highway Contractors' Division; and a Heavy Construction, Utilities Contractors' Division. It provides a document service and disseminates information on all these aspects of construction, and on contract forms, estimating, and accounting; safety; handling of jurisdictional labor disputes; and apprentice training. Although information is primarily for Association members, questions from the public are also answered.

The Association's journal, *The Constructor,* may be obtained by subscription. A price list of other publications is available on request.

ASSOCIATED SPRING CORP.

18 Main Street
Bristol, Conn. 06010
Telephone: 582–9581 Extension 469 (Area code: 203)

The ASC Research Center Library is technically oriented to provide coverage in the field of spring-making, including springs and their mechanical elements, such as compression, extension, torsion, flat, flat coil, and washers; spring materials and machinery; spring processes, such as heat treatment and shot peening; spring testing; and standards and specifications. Material in the collection includes books, journals, reports, patents, films, and data.

Reference, consulting, translating, and document services are provided without charge. Company reports are generally restricted to Corporation staff. *Mainspring,* a bimonthly publication, is available on controlled, free distribution.

ASSOCIATION OF ALLERGISTS FOR MYCOLOGICAL INVESTIGATIONS, INC.

1310 Austin Street
Waco, Tex. 76701
Telephone: 754–5531 (Area code: 817)

This professional society provides a consulting service based on a literature collection on mold allergy, including air analysis, improvement in allergen preparation, and fungi in the etiology of respiratory allergic diseases. The service is performed by physicians practicing in this specialty and is primarily for physicians, but is also available to others engaged in bona fide research.

ASSOCIATION OF AMERICAN GEOGRAPHERS

1146 16th Street NW.
Washington, D.C. 20036
Telephone: 296–6345 (Area code: 202)

The mission of the Association is to further professional investigations in geography and to encourage the application of geographic findings in education, government, and business. It sponsors general research in geography, field studies in physical geography, and projects in educational geography. The Association also serves as a channel for the acquisition of geographic journals through an exchange program with foreign countries. Russian periodicals are deposited in the University of Chicago Library, those in Chinese at the Colgate University Library, and those in other languages at the University of Cincinnati Library. The materials are used for the preparation of state-of-the-art reports. Loan services are provided through the libraries.

Publications available on subscription from the Association are the quarterly *Annals of the Association of American Geographers* and *The Professional Geographer,* which appears bimonthly. Monographs are issued irregularly.

ASSOCIATION OF AMERICAN PESTICIDE CONTROL OFFICIALS, INC.

Office of the Secretary
1101 State Office Building
102 North Governor Street
Richmond, Va. 23219
Telephone: 644–4111 Extension 2605 (Area code: 703)

The secretary's office of the Association provides information on pesticide chemicals and on the enforcement of laws concerned with pesticide sale and distribution. Inquiries are answered or referred to other organizations without charge. The only limitation on these services is the length of time available for dealing with a given question.

Pesticide Chemicals Official Compendium contains monographs about chemicals being used in the pesticide field. Each year following the annual convention a bulletin is prepared and distributed under the title, *Proceedings of the Annual Convention.*

ASSOCIATION OF CONSULTING CHEMISTS AND CHEMICAL ENGINEERS, INC.

501 Fifth Avenue
New York, N.Y. 10017
Telephone: 687–5892 (Area code: 212)

The Association functions as a clearinghouse for consultants and furnishes, upon request and without charge, the names and addresses of those of its members specializing in particular fields of chemistry and chemical engineering.

The *Consulting Services* directory, available for purchase, is published in looseleaf form and brought up to date biennially. It contains a classified index of members specializing or qualified in various fields of chemistry and chemical engineering and gives descriptive data on each member. Alphabetical and geographical indexes are provided.

ASSOCIATION OF OIL PIPE LINES

Suite 1208, RCA Building
1725 K Street NW.
Washington, D.C. 20006
Telephone: 333–2226 (Area code: 202)

This voluntary association of oil pipeline companies makes available statistics on current oil pipeline construction in the United States and data on oil pipeline transportation. Information is provided to anyone without charge.

Two annual publications, *Shifts in Petroleum Transportation* and *Tables of Statistics on Oil Transportation,* are available free on request.

ASTRA (APPLIED SPACE TECHNOLOGY-REGIONAL ADVANCEMENT), *See* MIDWEST RESEARCH INSTITUTE

ASTRONOMICAL LEAGUE

4 Klopfer Street
Pittsburgh, Pa. 15209
Telephone: 391–2100 Extension 333 (Area code: 412)

A federation of amateur astronomical societies, the League promotes amateur astronomical activities, assists in organization and observational work, and coordinates amateur programs with professional research. It maintains a limited collection of books, which are available on loan, and offers professional assistance on instrumentation problems.

ASTROPHYSICAL OBSERVATORY, *See* SMITHSONIAN INSTITUTION

ATLANTIC REFINING CO.

Research and Development Department

500 South Ridgeway Avenue
Glenolden, Pa. 19036
Telephone: 586–4700 (Area code: 215)

The technical information section of the Department maintains a specialized library of books, journals, reports, and patents on petroleum refining and petrochemical manufacture. Foreign literature comes from Russian, Italian, Spanish, French, and German sources.

Nonconfidential material is available for interlibrary loan. Literature searches, translations, and a literature alerting service are provided for Company staff only.

Research and Development Department (Southwest Division)

Atlantic Refining Company
Post Office Box 2819
Dallas, Tex. 75221
Telephone: 747–6484 (Area code: 214)

The Department has a technical information center which acquires, evaluates, abstracts, indexes, translates, compiles, and analyzes information on petroleum exploration and production. It is concerned with research on crude oil production and related sciences and technology, such as chemistry, physics, geology, geophysics, engineering, economics, electronics, and mathematics. Languages represented in the collection are English, Russian, Italian, Spanish, French, and German.

Nonconfidential material is available for interlibrary loan. Reference and translating services are provided for Company staff only.

ATOMIC ENERGY LEVELS INFORMATION CENTER, *See* U.S. DEPARTMENT OF COMMERCE, NATIONAL BUREAU OF STANDARDS

ATOMIC INDUSTRIAL FORUM, INC.

850 Third Avenue
New York, N.Y. 10022
Telephone: 754–1075 (Area code: 212)

A technical-management association, the Forum centers its activity on solving problems of the atomic industry. It acquires unclassified information on Government contract practices, nuclear insurance and indemnity, radiation and radioisotopes, nuclear space applications, atomic energy legislation, industry statistics, patent policies, health and safety, nuclear standards, U.S. Atomic Energy Commission licensing and regulations, uranium mining and milling, reactor fuel ownership and financing, industry-Government relations, civilian nuclear reactor policies and progress, and atomic energy and its applications.

The Forum's library, which serves as an official depository for the U.S. Atomic Energy Commission, includes a comprehensive collection of unclassified and unpublished AEC reports, which are available to the general public for reference use. Interlibrary loans may be arranged. Consulting and document services are available only to Forum members.

Forum Memo to Members appears monthly. Other Forum publications are generally available to the public for purchase.

ATOMICS INTERNATIONAL, *See* NORTH AMERICAN AVIATION, INC.

ATOMIC TRANSITION PROBABILITIES DATA CENTER, *See* U.S. DEPARMENT OF COMMERCE, NATIONAL BUREAU OF STANDARDS

AUBURN UNIVERSITY

Alabama Agricultural Experiment Station

Auburn University
Auburn, Ala. 36830
Telephone: 887–6511 Extension 279 (Area code: 205)

A research agency, the Station assembles data on the biological sciences, agriculture, forestry, social sciences as applied to agriculture and rural life, machinery in agriculture, and agricultural marketing. Technical inquiries are answered and referrals made. Consulting service is provided as time and staff permit. No fees are charged. Data must not be used out of context.

Publications reporting research results are provided free on request.

Library

Auburn University
Auburn, Ala. 36830
Telephone: 887–6511 Extension 701 (Area code: 208)

The library provides general support for the University curriculum, with concentration in agricultural sciences, chemistry, engineering, and mathematics. Literature is in English, Russian, Italian, Spanish, French, and German.

Material may be borrowed through interlibrary loan by non-University personnel.

AUTOMOBILE MANUFACTURERS ASSOCIATION

320 New Center Building
Detroit, Mich. 48233
Telephone: 872–4311 (Area code: 313)

The patent department library of the Association is a center for information on automobiles, including their parts and accessories and the history and economics of the automobile industry. Languages represented in the collection are English, Italian, Spanish, French, and German.

Reference and document services are provided. State-of-the-art reviews and search reports on specific patent and trademark problems are prepared. The library is not generally open to the public and most services are restricted to member companies. However, services can be made available to writers and researchers.

Automobiles of America, published by the Association, may be purchased. A new edition of this volume is issued every 5 years.

AUTOMOTIVE SAFETY FOUNDATION

200 Ring Building
Washington, D.C. 20036
Telephone: 338–3115 (Area code: 202)

The Automotive Safety Foundation is a nonprofit educational and research organization working in the interest of safe and efficient highway transportation.

The Foundation makes annual grants of funds to colleges, universities, and organizations operating in the public interest for training of such specialists as traffic engineers, traffic police, highway engineers, and motor fleet supervisors, and for carrying out projects to advance traffic safety.

ASF also provides technical staff assistance to State and local governmental agencies for specialized studies designed to improve highway and traffic management or to carry out traffic safety programs. Such technical assistance is provided only when the type of help sought is not available from other sources.

The Foundation's *Annual Report* is available free on request; from time to time special ASF reports covering some aspect of highway transportation are issued.

AVCO CORP.

Avco-Everett Research Laboratory

2385 Revere Beach Parkway
Everett, Mass. 02149
Telephone: 389–3000 Extension 61 (Area code: 617)

The Laboratory maintains a library of printed and nonprinted material on magnetohydrodynamics and magnetohydrodynamic power generation, plasma physics, reentry physics, gas dynamics, hypersonic aerodynamics, ablation, chemical kinetics, shock tube technology, satellite recovery technology, and electric propulsion for space flight. Languages represented are English, Russian, French, and German.

Although the collection is primarily for the use of employees of the Laboratory and of the Avco Corp., interlibrary loans are arranged whenever possible and technical questions from outside sources answered.

Electronics Division

Avco Corp.
2630 Glendale-Milford Road
Cincinnati, Ohio 45241
Telephone: 771–8931 (Area code: 513)

The technical library of the division contains books, journals, reports, and company data concerning electrical engineering, especially radar, applied mathematics, physics, mechanical engineering, astronomy, and computers. English, French, and German sources are represented.

Although the Library is not open to the public, interlibrary loans can be arranged, provided the information requested is not proprietary.

The *Library Bulletin,* announcing recent acquisitions, is issued at irregular intervals.

Lycoming Division

Avco Corp.
550 South Main Street
Stratford, Conn. 06497
Telephone: 378–8211 Extension 547 (Area code: 203)

The Division maintains a gas turbine library with material relating to the research, development, and manufacture of aviation and industrial gas turbines and their components, internal aerodynamics, design tests and test facilities, metallurgy of related materials, manufacturing methods, missile reentry vehicles and structural components, rocket chambers, and nose cones.

The library is not open to the public; however, reference and document services are provided for Government agencies. The collection is available for limited use by Government contractors subject to the approval of the Department of Defense office responsible for a given contract.

Ordnance Division

Avco Corp.
Williamsburg Pike
Richmond, Ind. 47374
Telephone: 2–4201 Extension 450 (Area code: 317)

The technical library of the Division deals mainly with general science and technical background material in electronics and ordnance. Subjects included are airborne and ground radar systems, infrared communications equipment, air traffic control systems, explosives, propellants, guns, ammunition, missile components, guidance and control equipment, and arming and fusing of missiles.

Although the library is organized primarily for the use of staff members, it is open to the public for on-site use. Reference and document services are also provided in response to telephone requests. Interlibrary loans are available, subject to security regulations.

Spaceflight Programs Office

Avco Corp.
6501 East Admiral Place
Tulsa, Okla. 74115
Telephone: 835–6911 (Area code: 918)

The Spaceflight Programs Office has a modest library of books, journals, and reports on the physical and space sciences as well as a complete collection of the *Physical Review* from 1913 to the present. Reference and document services are available. Loans of material can be arranged for outside requesters or on an interlibrary loan basis with other organizations if the information desired is not proprietary or restricted by Government regulations.

Technical Communications Department

Avco Corp.
201 Lowell Street
Wilmington, Mass. 01887
Telephone: 658–8911 (Area code: 617)

The research library section within the Department serves as a center of information on missile and satellite research and development, materials research and development, communications development, electronic systems, environmental testing and flight simulation, operations analysis, hypersonic instrumentation systems, specialized research equipment, aerodynamics, and human engineering. Languages represented in the collection are English, Russian, Italian, French, German, and Spanish.

Reference, consulting, document, and translating services are provided; literature searches conducted; and bibliographies prepared. Services available are subject to company general regulations, proprietary information policies, and Government security regulations. The library is not open to the public, but interlibrary loans may be arranged.

BAKER CASTOR OIL CO.

40 Avenue A
Bayonne, N.J. 07002
Telephone: 436–8800 (Area code: 201)

The Company has a specialized library relating to vegetable oils, with particular emphasis on castor oil and its derivatives. Material consists of books, journals, reprints, and patents in English, French, German, and Russian. Limited reference services are available.

BARIUM & CHEMICALS, INC.

Post Office Box 230
Riverview Place
Steubenville, Ohio 43952
Telephone: 282–9776 (Area code: 614)

The Company provides consulting, analysis, and testing services for a fee in the chemical technology of barium, strontium, and other alkaline earth chemicals. Its library collection is available for on-site reference upon approval.

BARNES ENGINEERING CO.

30 Commerce Road
Stamford, Conn. 06902
Telephone: 348–5381 (Area code: 203)

The Company does research on and manufactures electro-optical instruments; infrared components; instruments and systems, including radiometers; thermistor infrared detectors; infrared scanners and trackers; infrared sources; horizon sensors and other space instruments; and radiation standards. Its library is oriented to this specialty, with physics and electronics books, particularly as related to space, comprising a large part of the collection.

Reference and document services are available, primarily for Company employees. For others, they are limited according to time and effort required. A consulting service is provided by the Technical Planning Department with no charge for the initial consultation.

Techniques, issued at irregular intervals, is available on request.

BARTLESVILLE PETROLEUM RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

BATTELLE MEMORIAL INSTITUTE

505 King Avenue
Columbus, Ohio 43201
Telephone: 299–3191 (Area code: 614)

A not-for-profit organization for sponsored research, the Battelle Memorial Institute has laboratories in Columbus, Ohio; Geneva, Switzerland; and Frankfurt/Main, Germany. Programs of basic and applied research are conducted in the areas of chemistry, biosciences, chemical engineering, ceramics, physics, nuclear energy, electronics, metallurgy, mechanical engineering, and economics. Data are disseminated to the scientific community through information centers operated by the Institute.

The primary publication of the Institute is the *Battelle Technical Review,* issued monthly without charge to a select mailing list. It contains papers by staff members, news briefs of Battelle research projects, and abstracts of current technical literature. The abstracts are selected from the literature collections in the Battelle Library. The library of the Columbus laboratories will provide photocopies of publications listed in the abstract section, if not otherwise available, at a fee. Reprints of articles published in the *Review* are also available from the Publications Office of the Institute in Columbus.

Selenium and Tellurium Abstracts is prepared by the Institute under contract with the Selenium and Tellurium Development Committee, a trade association of selenium and tellurium producers. It is issued monthly without charge to individuals or organizations engaged in research or development in the field.

Area Economics Information Center

Serving the Area Economics Research staff of the Institute, the Information Center prepares card extracts of information on regional and economic development, urban renewal and land use, material resources, demography, effect of technology on economy, transportation, water supply and use, water pollution and treatment, and management of industrial and municipal wastes.

Information services are available only on a contract basis.

Battelle-Defender

Sponsored by the Department of Defense, this activity performs research and collects and processes information on advanced defense techniques against exoatmospheric offensive vehicles, such as ballistic missiles, and on penetration problems associated with such missiles. Technical consultation and reference services are limited to users specified by the DOD contracting agency.

Cobalt Information Center

The Cobalt Information Center is the American office of the Centre d'Information du Cobalt which is located in Brussels, Belgium. Other branch offices are in London, England, and Dusseldorf, Germany.

At the Battelle office, information is collected on all areas of cobalt use and the metallurgy and chemistry of cobalt. Holdings consist of research reports from the Centre d'Information du Cobalt, other technical reports and data, journals, books, and patents. Foreign literature includes material in Russian, Spanish, French, German, and Japanese. Information is also obtained from visits to cobalt producers and users.

There are no restrictions on information services. The Center answers technical questions in person or by mail, makes literature searches, prepares translations for its own use and makes copies available on request, and provides original or reproduced copies of its holdings. These services are available without charge. The collections of the Center are also open for on-site reference.

Publications distributed without charge are *Cobalt,* a quarterly journal published in English by the Centre d'Information du Cobalt, which provides reports on current research, technical articles, and abstracts from the literature; and *Alloy Digest Sheets on Cobalt Containing Alloys,* which presents data for over 80 different alloys. Newsletters and new literature listings, distributed semiannually, are available without charge.

Defense Metals Information Center

Sponsored by the U.S. Department of Defense, the Defense Metals Information Center maintains a collection of reports, books, journals, patents, and trade literature on refractory metals, including columbium, tantalum, tungsten, molybdenum, chromium, vanadium, rhenium, and their alloys and some platinum group metals; on light metals, including titanium, beryllium, magnesium, and aluminum; high-strength alloys for use at high temperatures; high-strength steels; corrosion and oxidation-resistant coatings; thermal protection systems; and inert parts of solid propellant rocket motors.

DMIC answers technical questions and provides technical advisory services to producers and fabricators of defense metals and to the Department of Defense. Services are free to Government agencies and their contractors and to companies or organizations engaged in research, development, or production which supports the defense effort. The unclassified information files containing extracts or condensations of documents are open for direct use by visitors.

Publications include technical reports; state-of-the-art reviews, the direct products of the Center; *DMIC Selected Accessions List,* issued monthly and providing annotations of newly acquired books, reports and symposia proceedings; and *Review of Recent Developments,* issued weekly and presenting information on one of 13 timely technical areas. Technical reports and technical memoranda prepared by the Center may be obtained from DMIC at no cost by Government agencies and their contractors. Others may purchase copies from the Office of Technical Services, Department of Commerce, Washington, D.C., 20234.

DMIC maintains a branch office at 5455 Wilshire Boulevard, Los Angeles, Calif.

Electronic Component Reliability Center

Sponsored by private industry and Government agencies, the Center serves as an information clearinghouse and research laboratory in the area of reliability engineering as related to electronic components. Data are collected on failure, deterioration, heat and current effect, durability, and techniques for reliability analysis. Test reports from sponsors of the Center are summarized on cards. The Center also engages in a program of research covering reliability analysis techniques, screening procedures, accelerated life testing, statistical test design, and physics of aging of semiconductor devices. It establishes reliability requirements and sets standards for quality control.

Information services and resources are available only on a contract basis. Technical consultations above an initial service fee are subject to cost charges.

Publications issued include the *ECRC Newsletter;* data summary sheets, each sheet giving detailed test results for a specific electronic component made by a particular manufacturer; data summary indexes; and technical reports, providing information on new components, test designs, specialized component usage, and failure modes.

Fuel Cell Information Index

Sponsored by an industrial Fuel Cell Research Group, the Index is a center of information on various power sources and on the historical development of fuel cells. A collection of reports, journals, patents, and books provide subject coverage on fuel cell types and applications, electrodes and electrolytes, fuels and oxidizers, batteries, energy conversion systems, and electrochemical theory and techniques. Foreign literature is collected in Russian, Italian, Spanish, French, and German. Technical reports, indexes, and bibliographies are issued. Reference and document services are limited to the members of the Fuel Cell Research Group.

Information Research Center

Established as an information resource for the Institute's Department of Economic and Information Research, the Center is designed to provide information on the state of the art of information systems and other aspects of the communication of scientific and technical information and data. Subject coverage includes communication of information; processing, storage, and retrieval systems; manual and machine information systems and techniques; information management; information centers and services; and personnel, organizations, and companies active in these areas and related research. The collection consists of journals, reports, books, conference papers and proceedings, internal memoranda, telephone conversation and trip reports, and newspapers.

Literature searches, evaluations, state-of-the-art reports, and quick responses to questions can be provided under sponsorship.

Library

Serving the Battelle staff as a central reference source, the Library's holdings cover mechanical and chemical engineering; ceramics; metallurgy; fuel, petroleum, textile, and paper technology; mineralogy; space technology; nuclear energy; chemistry and biochemistry; psychology; and information research. In addition to the central Library, there are several specialized libraries. The Slavic Library houses Russian and other Slavic publications and cover-to-cover translations of Russian technical journals. The Engineering Physics Library maintains a special collection, particularly catalogs and specifications, in the fields of electronics and electrical engineering. The Economics Library specializes in engineering economics, market research, and research administration. Materials are arranged according to the Library of Congress classification system.

The Library makes literature searches, prepares specialized bibliographies, answers specific questions, and provides technical advice on the planning of libraries and information centers. Translation services are available only to staff members. Copying is done for a service charge. Interlibrary loans may be arranged with certain qualifications.

Recent library acquisitions are listed in the *Battelle Technical Review* or in the Library's *Info Tips,* a selected list of new books circulated to the staff once a month.

Radiation Effects Information Center

Sponsored by the U.S. Air Force, the National Aeronautics and Space Administration, and the Atomic Energy Commission, the Radiation Effects Information Center is a clearinghouse for information on the effects of nuclear reactor, pulse reactor, nuclear burst, and space radiation on materials, devices, and systems that might be used in nuclear powered vehicles, nuclear auxiliary power units, and associated ground support equipment. Materials affected by radiation that REIC is chiefly concerned with are: Electronic and electrical components; semiconductor devices and materials; hydraulic, pneumatic, and mechanical components; polymeric materials; fuels, lubricants, hydraulic fluids, and other organic fluids; ceramic materials, including graphite; metals and alloys; and propellants and explosives. REIC also collects information about space and weapon radiation-simulation facilities, dosimetry, and experimental methods and techniques. Biological effects of radiation are excluded.

The Center is geared to serve design engineers with rapid answers to technical inquiries rather than provide a bibliographic reference service. Pertinent literature is processed for ready retrieval and is available for on-site use. No material is loaned, nor are retention copies supplied. Complete services are available to Government agencies and their contractors, but partial services are provided to others on a need-to-know basis.

The REIC *Monthly Accession List* contains abstracts of unclassified reports and journal articles received by the Center. Other publications are annual state-of-the-art reviews, technical memoranda on specific subjects of current interest or brief reviews of present research programs, and semiannual compilations of Government-sponsored contracts on radiation effects. All are available to Government agencies and their contractors without charge.

Transducer Information Center

Recently established with the support of the U.S. Air Force, the Center has been given the task of collecting information on transducers used in telemetry applications. Information collected will include evaluation reports on transducers, environmental effects data, testing facilities, reports on new transducer developments, reliability and performance reports, materials research applicable to transducers, transducer components, new transducing techniques, and systems application of transducers. Files will be maintained for use by Government and industry.

BATTENFELD GREASE & OIL CORP.

3148 Roanoke Road
Kansas City, Mo. 64111
Telephone: 821–2940 (Area code: 816)

The research department of the Battenfield Grease & Oil Corp. maintains a library on the manufacture and applications of lubricants, asphalt products, mastics, and roof coatings; raw materials used in lubricating greases; and chemical and physical data on these substances. Information is filed by subject, application, and raw material.

Reference and orientation consulting services are provided without charge. Literature searches and data compilations are performed at hourly rates. If the answer to a technical question is not available, the problem may be solved by analysis or experimentation, if desired. Loans of photocopies of documents are not available, nor are visitors allowed direct access to the collection.

BAY AREA AIR POLLUTION CONTROL DISTRICT

1480 Mission Street
San Francisco, Calif. 94103
Telephone: 552–1300 (Area code: 415)

The library of the Control District assembles facts on the characteristics, sources, and effects of air pollutants, meteorology, sampling methods, analytical methods; equipment and process for control, research methods; health impairment from pollutants, and legal aspects of air pollution.

Reference service and literature searches are provided without charge, and there are no restrictions on use of the collection. Hard-copy material, such as books and magazines, may be borrowed through interlibrary loan. Documents on microfilm may be viewed at the library and enlargements from microfilm or photocopies purchased. Copies of the Uniterm index to the library collection are located at the Robert A. Taft Sanitary Engineering Center in Cincinnati, Ohio, and at the New York State Air Polution Control Board in Albany, N.Y. The index cards are sold on subscription.

BECKMAN INSTRUMENTS, INC.

2500 Harbor Boulevard
Fullerton, Calif. 92632
Telephone: 871–4848 Extension 358, 359, or 675
(Area code: 714)

The company's research library maintains a collection of books, journals, reports, films and charts, and data. This material is assembled from English, Russian, Italian, Spanish, French, and German sources. Subject areas covered are scientific instruments, electronics, mathematics, physics, and medical electronics.

Reference service is provided; however, the collection may be used only on the premises, and a security clearance is necessary for those wishing access to classified documents. Consultations with members of the technical staff are also possible at no charge. Patents are available at the company's law library. Standards are kept at the standards department.

Publications issued include technical reports, conference proceedings, and a data handbook.

BEET SUGAR DEVELOPMENT FOUNDATION

156 South College Avenue
Fort Collins, Colo. 80521
Telephone: 482–8509 (Area code: 303)

The Foundation acquires reports and nonprinted material on the improvement of sugar beet production, beet sugar processing, and by-product utilization. It answers inquiries concerning technical aspects of the sugar beet industry. This service is restricted primarily to member companies, the U.S. Department of Agriculture, and State agricultural experiment stations.

The *Journal of the American Society of Sugar Beet Technologists,* issued quarterly, may be obtained by subscription.

BELFOUR ENGINEERING CO.

Mechanical Properties Data Center

Suttons Bay, Mich. 49682
Telephone: 271–3911 (Area code: 616)

The Center is sponsored by the U.S. Air Force and has as its primary purpose the collecting, processing, analyzing, and disseminating of current and historical knowledge pertaining to the mechanical properties of structural materials, especially metals and plastics, and including descriptions of test procedures, material formulation, processing, and environments. Original references are cited. The system is mechanized and contains some 1 million complete descriptions of properties of various materials. Approximately 100,000 new data points are stored in the system each month.

Materials information is available at no cost to representatives of Government agencies and companies engaged in defense research. A security clearance is required for those wishing access to classified information.

Publications issued by the Center include technical reports, state-of-the-art reviews, data handbooks, and bibliographies.

BELL & HOWELL, INC.

360 Sierra Madre Villa
Pasadena, Calif. 91107
Telephone: 798-5601 (Area code: 213)

The Company's research center provides information for its corporate divisions and affiliates in the fields of electronics, chromatographic analysis, gas analysis, instrumentation, magnetic properties, magnetic recording systems, magnetism, mass spectrometry, microanalysis, microminiaturization, photographic equipment, photographic recording systems, printed circuits, solid state physics, and transducers. Holdings consist of books, journals, reports, patents, films and photos, and data. Foreign literature includes material in Russian, French, German, and Japanese.

The Center prepares abstracts and indexes, makes literature searches, and provides reference and document services. Services are available to other libraries on a reciprocal basis. For permission to use the collections on-site, the manager of library services should be contacted by telephone or letter.

BELL HELICOPTER CO.

Mail:
Post Office Box 482
Fort Worth, Tex. 76101

Location:
Texas Highway 183
Hurst, Tex.
Telephone: 282-7111 (Area code: 817)

Primarily a manufacturing concern, the Bell Helicopter Co. maintains a library for the use of its staff. The collection consists of books, journals, reports, and papers covering all facets of helicopter design, development, and research, as well as materials, processes, and systems, such as electronics, hydraulics, and propulsion.

Although the library is not open to the public, specialized data may be made available to scientific and technical personnel on a limited basis. Only unclassified nonproprietary reports are available, unless a need-to-know is established through proper channels. Interlibrary loan may be arranged.

BERKELEY THERMODYNAMICS LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

BERNICE P. BISHOP MUSEUM

1355 Kalihi Street
Honolulu, Hawaii 96819
Telephone: 855-951 (Area code: 808)

Bishop Museum is the only American museum devoted entirely to the Pacific region: Polynesia, Melanesia, Micronesia, and adjacent areas of Indonesia and southeast Asia. Its library provides facilities for the study of voyages and explorations, anthropology, botany, zoology, linguistics, archeology, geology, and geography in this area.

Besides books and serials, the library also contains field reports, old newspapers and newspaper clippings, unpublished material, and original sketches and paintings. The photograph collection contains more than 33,000 valuable negatives and prints. There is a collection of tape recordings and records of Pacific Islands music, chanting, and interviews. The Museum also has a comprehensive map collection.

The privilege of on-site reference may be requested by students and researchers. Reference questions are answered as time allows. Books may be borrowed through interlibrary loan. Limited duplication service is available.

BETHLEHEM STEEL CO.

Homer Research Laboratories

Bethlehem, Pa. 18016
Telephone: 867-2424 Extension 284-444 (Area code: 215)

The Laboratories' Technical Information Division surveys developments in the iron and steel industry as reported in the technical literature and makes this information available to research and supervisory personnel in all Bethlehem plants. It maintains an information retrieval system for internally generated reports. Subject coverage in iron, steel, and related fields includes ores, fuels, pollution, temperature measurement, automation, refractories, direct processes, blast furnace practice, steel production, ferroalloy production, foundry practice, heating furnaces, rolling and forging, welding, cleaning, protective coatings, properties, corrosion, analysis, and economics. Material includes English, Russian, Italian, Spanish, French, German, Japanese, Chinese, Hungarian, Polish, Dutch, Czechoslovak, and Portuguese publications of all types.

The public is not granted access to the collection. Books and journals are lent to research personnel only. Other Company personnel must use material on the premises. Publications issued regularly by the Division are: *List of References,* weekly; *List of Translations,* bimonthly; and *Library Acquisition List,* bimonthly.

Schwab Memorial Library

701 East Third Street
Bethlehem, Pa. 18016
Telephone: 867–2424 Extension 3325 (Area code: 215)

The collection of books, journals, and reports in the Library covers all phases of the steel industry, both business and technical. In addition to ferrous metallurgy, holdings include material in allied fields, such as civil, mechanical, architectural, and chemical engineering. On-site reference is permitted and interlibrary loans are available.

BIO-DYNAMIC FARMING & GARDENING ASSOCIATION, INC.

Rural Delivery 1
Stroudsburg, Pa. 18360
Telephone: 992–4432 (Area code: 717)

The Association promotes the biodynamic method of agriculture for the purpose of improving nutrition and health. It is interested in soil conservation, balanced fertility, the principles of ecology, and a stable diversified agriculture through the use of biodynamic treatment of manures, composts, and green manures to raise their fertilizer and humus forming qualities. Research for improvement in composting and humus formation is conducted at the Association's Biochemical Research Laboratory at Threefold Farm in Spring Valley, N.Y. A library is maintained, consisting of a collection of reports on agribiological subjects with emphasis on methods of chromatography and sensitive crystallization developed by the Laboratory for testing soils, composts, and produce.

Information is made available through literature and conferences. A consulting and testing service on soils, crops, and farm and commercial composting is provided by the Biochemical Research Laboratory. Fees for the latter are determined individually.

Bio-Dynamics, published quarterly, is available on subscription.

BIOLOGICAL SCIENCES CURRICULUM STUDY, *See* UNIVERSITY OF COLORADO

BIOLOGICAL SERIAL RECORD CENTER, *See* GEORGE WASHINGTON UNIVERSITY

BISHOP MUSEUM, *See* BERNICE P. BISHOP MUSEUM

BITUMINOUS COAL RESEARCH Inc., *See* NATIONAL COAL ASSOCIATION

BLOCKED IRON CORP.

11 North Pearl Street
Albany, N.Y. 12207
Telephone: 465–3122 (Area code: 518)

The Corporation has organized a collection of books, journals, reports, patents, films and photographs, data, and nonprinted material chiefly for the use of its own staff. Subjects covered are minerals beneficiation and agglomeration of fine-grained materials that are principally, but not exclusively, ferrous.

Upon request, persons engaged in research may be granted on-site reference privileges. However, access to confidential and proprietary information, data, and processes is restricted to Corporation employees. A consulting service is available, with fees determined individually.

THE BOEING CO.

Aero-Space Division

7725 East Marginal Way South
Seattle, Wash. 98124
Telephone: 656–2061 (Area code: 206)

The Division library has collections on space flight and exploration, missiles, rocket engines and propulsion, electric propulsion, metallurgy and nonmetallic materials, fatigue, stress analysis, reliability, semiconductor technology, bionics, aerospace medicine, marine vessels and propulsion, communication systems, plasma physics, cryogenics, and thermodynamics. Books, journals, reports, specifications, standards, technical orders, and films comprise the holdings. The major language sources are English, Italian, French, and German.

Reference service is furnished without charge. Use of the card catalog is restricted to Boeing employees having at least a confidential security clearance. Interlibrary loan may be arranged for unclassified, nonproprietary materials.

Airplane Division—Wichita Branch
The Boeing Co.

3801 South Oliver Street
Wichita, Kans. 67210
Telephone: 687-4259 (Area code: 316)

Subjects covered in the library collection are management, physics, organic and inorganic chemistry, polymer chemistry, fluid flow, structures, electrical engineering, electronics, radar, magnetohydrodynamics, industrial medicine, industrial psychology, operations research, industrial technology and engineering, and personnel administration. Holdings consist of books, journals, reports, films and photos, data, military specifications and standards, technical orders, and maps and charts. Unclassified and nonproprietary material is available for loan.

Boeing Scientific Research Laboratories

Mail:
Post Office Box 3981
Seattle, Wash. 98108

Location:
1422 South Trenton Street
Seattle, Wash.
Telephone: 585-4731 (Area code: 206)

Material assembled in support of the work of the Laboratories covers plasma physics, astrophysics, solid state physics, quantum mechanics, aerodynamics, propulsion, applied mechanics, and pure and applied mathematics. Holdings include books, journals, reports, and maps and charts. Foreign sources are in Russian, Italian, Spanish, French, and German.

The collection is available for interlibrary loan, inhouse loan, and on-site reference, and technical questions are answered without charge. A union list of serial publications in Boeing libraries is available.

BOLT, BERANEK, AND NEWMAN, INC.

50 Moulton Street
Cambridge, Mass. 02138
Telephone: 491-1850 (Area code: 617)

This corporation conducts Government and privately sponsored research in acoustics, including architectural, physical, engineering, and psychoacoustics; noise abatement; engineering psychology; information systems; instrumentation; training systems; and computer technology.

Library inquiries are answered and brief reference services provided without charge. Technical consultations or extended literature searches are provided only on a contract basis. An interlibrary loan service is available only to recognized industrial and educational institutions in the New England area. Journals and published material may be borrowed through this service. Documents, however, are restricted to those which clients have permitted to be circulated. Photocopies of short, unrestricted publications are available.

BONNEVILLE POWER ADMINISTRATION, *See*
U.S. DEPARTMENT OF THE INTERIOR

BOOZ, ALLEN APPLIED RESEARCH, INC.

135 South La Salle Street
Chicago, Ill. 60603
Telephone: 372-1728 (Area code: 312)

Consulting services are provided by this firm in the areas of aerospace engineering, applied mathematics, automation, CBR warfare, communications, control engineering, equipment development, electronics, electronic data processing, industrial design, instrumentation, mechanical engineering, operations research, process engineering, product development, reliability engineering, statistics, systems engineering, technical economics, transportation research, undersea warefare, and meteorology. Fees are determined individually.

BORG-WARNER CORP.

Roy C. Ingersoll Research Center

Wolf and Algonquin Roads
Des Plaines, Ill. 60018
Telephone: 827-3131 (Aread code: 312)

The Center has a library, primarily for in-house use, on organic, inorganic, analytical, physical, and polymer chemistry; physics; metallurgy; mechanical and automotive engineering; magnetohydrodynamics; mathematics; automotive and aircraft components; manufacturing processes; heating and air conditioning; electrical devices; and household appliances.

Translations of library material from Russian, Italian, French, and German sources are made only for Corporation members. As a public service, however, brief technical questions are answered. Consulting service is provided only for potential products, and only if the patent release has been signed. There is no fee.

BOULDER CITY METALLURGY RESEARCH LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

BROOKHAVEN NATIONAL LABORATORY

25 Brookhaven Avenue
Upton, N.Y. 11973
Telephone: 924–6262 (Area code: 516)

Operated by Associated Universities, Inc., and having a prime contract with the U.S. Atomic Energy Commission, the Laboratory maintains a research library of books, journals, reports, films, and photographs on nuclear science, including physics, chemistry, biology, medicine, mathematics, engineering, instrumentation, health physics, meteorology, geology, and electronics. The material is in English, Russian, Italian, Spanish, French, and German.

The library is open to the public by appointment only; reference, translating, and document services are provided to the Laboratory staff. Interlibrary loans may be arranged.

Technical reports and conference proceedings are published by the Laboratory. The library's *Weekly Reading List* and *Monthly Acquisition List* are free on request.

BROOKLYN COLLEGE LIBRARY

Bedford Avenue and Avenue H
Brooklyn, N.Y. 11210
Telephone: 859–2400 (Area code: 212)

The Brooklyn College Library serves the students and faculty of the Brooklyn College campus of the City University of New York. The science resources are housed in the Science Division and include general science, agriculture, astronomy, biology, chemistry, geology, mathematics, physics, and psychology. Languages represented in the collection are English, Russian, Italian, Spanish, French, and German.

On-site reference service is available and interlibrary loan of books and periodicals may be arranged.

BUFFALO MUSEUM OF SCIENCE

Humboldt Park
Buffalo, N.Y. 14211
Telephone: 896–5200 (Area code: 716)

Under the direction of the Buffalo Society of Natural Sciences, the Museum maintains exhibit and study collections and a library. The subject scope is the natural history of the western New York area and includes biology; ornithology; herpetology; conchology; botany; geology, paleontology, and mineralogy of the Niagara frontier; anthropology; astronomy; and music.

Material in the collections is available primarily to members and local users; however, under certain conditions loans to other institutions can be arranged. General inquiries are referred to individual staff members and to other organizations in the Buffalo area. Technical consultations are provided by advance arrangement for a fee. The Museum provides no photocopies and does no literature searching, compiling, or preparation of reports.

Science on the March, published five times a year, may be obtained by subscription.

BUILDING RESEARCH ADVISORY BOARD, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

BUREAU OF COMMERCIAL FISHERIES, *See* U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF CUSTOMS, *See* U.S. DEPARTMENT OF THE TREASURY

BUREAU OF ECONOMIC GEOLOGY, *See* THE UNIVERSITY OF TEXAS

BUREAU OF LAND MANAGEMENT, *See* U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF MINES, *See* U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF RAILWAY ECONOMICS

Room 1002
Transportation Building
17th and H Streets NW.
Washington, D.C. 20006
Telephone: 628-9020 Extension 384 (Area code: 202)

The Bureau, sponsored by the Association of American Railroads, specializes in the worldwide historical and economic aspects of transportation from 1808 to the present. Its collection contains annual reports; hearings, bills, and debates in Congress and in foreign parliaments; railroad associations' proceedings and publications, including international associations; railroad history and statistics; railroad periodicals dating back to 1831; Civil War, World War I, and World War II material; and Interstate Commerce Commission Reports. Subject coverage includes all phases of railroading and the related subjects of air service, trails, roads, highways, pipelines, conveying systems, and waterways; finance; taxation; valuation; management; labor relations; and international transport. A union catalog of transportation material in other libraries is maintained.

The library is open to the public. Reference service is provided, and interlibrary loans are made. Photocopying is done through commercial facilities.

Recent Accessions of Interest, issued weekly, is free on request. Copies of bibliographies and reference lists, announced in *Recent Accessions* are furnished without charge within the limits of supply.

BUREAU OF RECLAMATION, *See* U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF SPORT FISHERIES AND WILDLIFE, *See* U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF WATER RESOURCES RESEARCH, *See* UNIVERSITY OF OKLAHOMA

BURROUGHS CORP.

Defense and Space Group

Mail:
P.O. Box 782
Paoli, Pa. 19301

Location:
Central Avenue and Route 202
Paoli, Pa. 19301
Telephone: 644-4700 (Area code: 215)

The library of the Defense and Space Group acquires and indexes books, journals, and reports. Its subject specialization is data processing electronics, electrical engineering, mathematics, physics, chemistry, business, and industrial management. Foreign literature comes from Russian, French, and German sources.

Reference and document services are primarily for the benefit of employees, but some material may be available by loan to others.

Electrodata Manufacturing and Engineering Division

Burroughs Corp.
460 Sierra Madre Villa
Pasadena, Calif. 91107
Telephone: 793-6121 (Area code: 213)

The Division performs an abstracting service in the field of computers, utilizing source materials in English and the Western European and Slavic languages. The abstracts are published bimonthly as *Abstracts of Computer Literature* in two editions: *Part I. Marketing Edition;* and *Part II. Engineering Edition.* Author and subject indexes are provided.

CALIFORNIA ACADEMY OF SCIENCES

Golden Gate Park
San Francisco, Calif.
Telephone: 221-5100 (Area code: 415)

The Academy conducts scientific research, promotes science education, and maintains the Science Museum, the Steinhart Acquarium, and the Morrison Planetarium, which are open to the public.

The Maillard Memorial Library, which is also sponsored by the Academy, is open to graduate students and professional personnel and provides reference service on astronomy, aquatic biology, botany, entomology, geology, ichthyology, herpetology, ornithology, and mammalogy, particularly of the Pacific Basin. All major languages are represented in the holdings, which consist of books, journals, reports, and a map collection.

CALIFORNIA COLLEGE OF MEDICINE

1721 Griffin Avenue
Los Angeles, Calif. 90031
Telephone: 223-1381 (Area code: 213)

The library of the California College of Medicine is devoted to general medicine in all its aspects and consists of books and journals in English, Russian, Japanese, Italian, Spanish, French, German, and Portuguese. Holdings are available for loan and on-site reference to any member of the scientific or medical public.

To study liaison with funding agencies and to provide information and assistance in the preparation of research proposals, the college has established a research committee composed of specialists in all areas of the basic medical sciences. Included are anatomy; surgery; clinical and biochemistry; cardiovascular, gastric, and pulmonary diseases; physiology and pharmacology; and physical and mental rehabilitation. Reports in English, Chinese, Japanese, Italian, Spanish, French, German, and Portuguese are acquired and evaluated. Consulting and document services are limited to research-grant applicants of the faculty of the California College of Medicine, granting agencies, and information centers.

CALIFORNIA FERTILIZER ASSOCIATION

719 K Street
Sacramento, Calif. 95814
Telephone: 444-7625 (Area code: 916)

Acting in collaboration with the University of California, other educational and research institutions, and with technicians of the fertilizer industry, CFA distributes information concerning fertilizer use on California soils and crops; soil fertility; fertilizer transportation, safety, application, and equipment; and other subjects of interest to the fertilizer industry.

The Association provides answers to technical inquiries directly, by sending printed or written material, or by making referrals to scientists on the staff of the University of California and other agencies. Services are available to anyone without charge. CFA publications include handbooks and technical pamphlets, some of which are priced at cost, with others distributed free.

CALIFORNIA INSTITUTE OF TECHNOLOGY

Jet Propulsion Laboratory

4800 Oak Grove Drive
Pasadena, Calif. 91103
Telephone: 354-3680 (Area code: 213)

Under contract to the National Aeronautics and Space Administration, the Jet Propulsion Laboratory conducts lunar, planetary, and interplanetary exploration and maintains numerous related supporting research and advanced development projects. JPL is manager of NASA's Deep Space Network established for two-way communications with spacecraft. In support of its program, the Laboratory maintains a literature collection drawn from sources in all major languages and consisting of books, journals, patents, data, and over 100,000 technical reports. On-site use of the collection is available to approved personnel of organizations that contribute to the national defense or space efforts.

Publications include *Astronautics Information Literature Searches;* the *Space Programs Summary,* a 6-volume bimonthly periodical on current progress; *JPL Bibliography* 39-1 (1938-1960), 39-2 (1960-61), 39-3 (1961-62), and 39-4 (1962-63), an indexed bibliography of all formal documents issued by the Laboratory; translations; and about 500 technical reports each year. All documents are published for automatic free distribution to a controlled list of recipients.

Libraries

California Institute of Technology
1201 East California Boulevard
Pasadena, Calif. 91102
Telephone: 681-7171 (Area code 213)

The General Library, as the center of the Institute's library system, houses the administrative office, which serves nine departmental libraries located in as many buildings on the campus. The departmental libraries maintain collections of books, periodicals, and basic reference works in aeronautics, astronomy, astrophysics, biology, chemistry and chemical engineering, geology, physics, humanities, and industrial relations. The General Library houses the collections in mathematics and engineering and the master catalog for the entire library system.

Reader privileges may be granted to noncampus users upon application. Photocopies of journals are provided in lieu of loan. Interlibrary loan services are available.

CALIFORNIA REDWOOD ASSOCIATION

617 Montgomery Street
San Francisco, Calif. 94111
Telephone: 392-7880 (Area code: 415)

A trade association, CRA maintains an information center to answer specific questions relating to California redwood (Sequoia sempervirens): Chemical, physical, and mechanical properties; coating and treatments; forests; lumber; and other products and related materials. A research staff provides free consulting services, and a technical library with books, journals, reports, proprietary information, and data on the subject is available for on-site reference.

CAMBRIDGE COMMUNICATIONS CORP.

238 Main Street
Cambridge, Mass. 02142
Telephone: 491–0710 (Area code: 617)

The Corporation provides subscribers with information services consisting of abstracts of information presented in published papers, conference papers, Government reports, and patents. The information, gathered from English, French, German, Italian, Spanish, and Russian sources, is available to subscribers in the form of journals, cards, and microcards.

Solid State Abstracts Journal surveys the theory, production, and use of solid state materials and devices. Subject categories include the physics, metallurgy, and electronics of semiconductors; phosphors; magnetics; dielectrics; superconductors; and metals. Each issue contains extensive cross references, a detailed subject index, and an author index. *Solid State Abstracts on Cards* contains the same information printed on 3″ x 5″ index cards or IBM cards. An alphabetical index and guide cards facilitate retrieval of information. The same abstracts are also made available as *Solid State Abstracts on Microcards.* Annual cumulative editions replace the microcards of the previous year; bimonthly cumulative editions include all abstracts for the current year to date.

In *Materials Abstracts on Microcards,* the solid state abstracts are grouped by material so that abstracts dealing not only with a specific material but also with properties of that material can be located. Cumulative microcards for 1957–1963 and subscriptions to current bimonthly microcards may be obtained.

Abstracts of papers on the growth of macroscopic single crystals are classified according to growth technique and material and printed as *Crystal Growth Abstracts on Cards.* Abstracts of current papers are provided on a subscription basis for updating the master file.

The *Information Processing Journal* reports on the theory, fabrication, and application of computers with emphasis on components; systems; logic; programming; mathematics; information theory; cybernetics; and applications of computers to science, engineering business, education, medicine, government, and the military. Each issue contains cross references, a detailed subject index, and an author index. Annual cumulative subject and author indexes are also provided.

The information processing abstracts are also printed as *Computer Abstracts on Cards.* An alphabetical index and guide cards facilitate the retrieval of information. Location of references by author is accomplished by means of the author index in the *Information Processing Journal.* The same abstracts are also printed as *Computer Abstracts on Microcards.* Annual cumulative editions replace the microcards of the previous year and bimonthly cumulative editions include all abstracts for the current year to date.

Plans are being formulated for *Aerospace Abstracts on Cards.*

CAMBRIDGE ELECTRON ACCELERATOR LIBRARY, *See* MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMPBELL SOUP CO.

100 Market Street
Camden, N.J. 08101
Telephone: 964–4000 Extension 2501 (Area code: 609)

The Company's Corporate Relations Department handles requests for information on food technology, nutrition, biochemistry, chemistry, microbiology, agriculture, home economics, and the manufacture of cans. This is accomplished either by routing inquiries to one of several specialized departments, or by utilizing the Company library which has a collection of books, journals, reports, and patents in English, French, German, and Japanese.

General questions are answered directly; technical questions may be transmitted for further handling to the Basic Research and Product Development Department, the Agricultural Research Department, or the Can-Making Research Group. Occasionally, the inquirer may be referred to outside agencies or to independent research organizations. These services are provided without charge, but are limited according to time and effort required.

The library is not open to the public; however, subject to the approval of a written request, arrangements can be made for scientists and graduate students in the field of food technology or related subjects to use its facilities. Interlibrary loans are made.

CAPE HAZE MARINE LABORATORY, INC.

9501 Blind Pass Road
Sarasota, Fla. 33581
Telephone: 924–1639 (Area code: 813)

The Laboratory performs marine biological research and maintains a specimen collection as well as a library of books, journals, and reprints. Reference and consulting services are available. There are no restrictions.

CARBORUNDUM CORP.

Buffalo Avenue
Niagara Falls, N.Y.
Telephone: 285–6631 (Area code: 716)

The Company has a library of books, journals, reports, patents, data and nonprinted material on ceramics, inorganic chemistry, crystallography, and solid state physics. Specific subject areas are hard materials, including abrasives and wear-resistant materials; refractories; cermets, including carbides, borides, nitrides, and silicides; refractory metals, including zirconium and hafnium; and electronic components, including thermistors. English, Russian, French, and German sources are included in the collection.

Reference service is limited primarily to Company personnel, with exchange service provided to local public and industrial libraries.

CARL A. BAYS & ASSOCIATES, INC.

Mail:
Post Office Box 36
Urbana, Ill. 61802

Location:
308 North Orchard Street
Urbana, Ill.
Telephone: 367–4096 (Area code: 217)

A commercial consulting and research and development facility, Bays & Associates evaluates and analyzes data pertaining to geology and geological engineering, geophysics, underground storage and underground waste disposal, subsidence, solution extraction of salt and other solubles, groundwater supplies, nonmetallic and industrial mineral development, exploration geophysical instrumentation, and underground electromagnetic (radio) wave transmission. Material is in English and Spanish.

Services are made available and consultations provided primarily on a fee basis. Under circumstances deemed proper by the Corporation, authorization may be granted for on-site use of file data and primary reports.

CARNEGIE INSTITUTION OF WASHINGTON

The Carnegie Institution is a privately endowed organization devoted to fundamental research and the application of knowledge to the improvement of mankind. Its current interests fall in three broad fields: The form, contents, and dynamics of the universe; the structure and evolution of the earth; and the frontiers of biology. Work in these areas is being carried out by the research centers operated by the Institution.

Department of Embryology

Carnegie Institution of Washington
115 West University Parkway
Baltimore, Md. 21210
Telephone: 467–1414 (Area code: 301)

The Department of Embryology's research function is to investigate the processes of development of egg cells from fertilization to birth and the environmental influences that help or hinder these processes. Data are collected on cells and tissues in cultures; techniques of radiology as related to the structure and functions of the placenta; the relations between material and fetal circulations; physiochemical mechanisms of sperm motility; sperm production; morphogenesis; heart formation; cell differentiation, particularly myosin synthesis and immunity mechanisms; and nucleic acids. The Department maintains a research collection of human embryos; there is also a reference collection of books, journals,reports, and films and photos.

With the approval of the Director, information is available to scientists interested in basic research. Most of the material is for on-site reference. Occasionally, material is loaned on a short term basis and in limited quantity. There is a charge for reproduction services. Publication of photographs is subject to certain restrictions.

Contributions to Embryology, issued irregularly, is the primary journal of the Department. It is available for purchase from the Office of Administration, Carnegie Institution of Washington, 1530 P Street NW., Washington, D.C., 20005. Current research findings are published in the *Annual Report of the Director of the Department of Embryology,* available free on request from the Department.

Department of Plant Biology

Carnegie Institution of Washington
Governors Avenue and Searsville Road
Stanford, Calif. 94305
Telephone: 323–7978 (Area code: 415)

Located at Stanford University, the Department of Plant Biology conducts research on photosynthesis and experimental taxonomy. Principal interests are the functional identification of chlorophylls in algae and the study of growth responses of plants to different altitudes and to regulated environmental conditions. A reference library of books and journals is available for on-site use. Research findings are published in the *Annual Report of the Director of the Department of Plant Biology,* available free on request.

Department of Terrestrial Magnetism

Carnegie Institution of Washington
5241 Broad Branch Road NW.
Washington, D.C. 20015
Telephone: 966–0863 (Area code: 202)

The Department of Terrestrial Magnetism has three principal research interests: Radio astronomy; geophysics, with emphasis on paleomagnetism, radioactive dating of Paleozoic and Precambrian rocks, and explosion seismology; and biophysics, particularly studies of the genetic code and the use of radioactive tracers to analyze protein synthesis. Research is supported by a reference library of books and journals oriented to projects in physics, particularly magnetic and electrical fields. The library is not open to the general public, but material is available for on-site reference by qualified researchers. Research findings are published in the *Annual Report of the Director of the Department of Terrestrial Magnetism,* available free on request.

Geophysical Laboratory

Carnegie Institution of Washington
2801 Upton Street NW.
Washington, D.C. 20008
Telephone: 966–0334 (Area code: 202)

The Geophysical Laboratory divides its program into five efforts: phase equilibrium studies of silicates, sulfides, oxides, and carbonates; isotopic studies of rocks involving radioactive isotopes for age determination and nonradioactive isotopes for rock formation analysis; statistical petrography; crystal structure analysis of minerals; and investigation of the organic constituents of fossils. Research is supported by a reference collection of books and journals. The library is not open to the general public, but material is available for on-site reference to qualified scientists. Research findings are published in the *Annual Report of the Director of the Geophysical Laboratory,* available without charge.

Mount Wilson and Palomar Observatories

813 Santa Barbara Street
Pasadena, Calif. 91106
Telephone: 796–4351 (Area code: 213)

Operated jointly by the Carnegie Institution and the California Institute of Technology, the Observatories have two of the world's largest telescopes and are engaged in research on the physical nature and evolution of celestial bodies and on the structure and dimensions of the universe. The program is supported by a scientific library of books, files of photographs of astronomical bodies, and spectrograms. Specialized areas of interest are electrical and magnetic fields in the universe; sunspots; composition of stars; size; distance, origin, evolution and aging of stars; and radio astronomy. The library is available to all competent scientists. Research findings are published in astronomical journals and summarized in the *Annual Report of the Director of Mount Wilson and Palomar Observatories,* available free on request.

Office of Administration

Carnegie Institution of Washington
1530 P Street NW.
Washington, D.C. 20005
Telephone: 387–6400 (Area code: 202)

The Office of Administration is the central depository and sales office for all annual reports and monographs published by the various departments and research centers of the Carnegie Institution. It issues the *Year Book of the Carnegie Institution of Washington,* a compilation of all the annual reports, which is available for purchase. Price lists are free on request. Out-of-print monographs are available on microfilm at cost. The Office also issues a list of depository libraries where Carnegie Institution publications are obtainable on interlibrary loan.

CARNEGIE LIBRARY OF PITTSBURGH

4400 Forbes Avenue
Pittsburgh, Pa. 15213
Telephone: 621–7300 (Area code: 412)

The Library's Technology Department is devoted to pure and applied sciences, with emphasis on industrial technology, especially chemistry and metallurgy. It is a regional reports center and repository for the U.S. Atomic Energy Commission; the Office of Technical Services, U.S. Department of Commerce; the Department of Defense; and the National Aeronautics and Space Administration. Complete numerical sets of U.S. and British patents and lists of patents arranged by classes and subclasses are available. Other types of literature regularly received are books, journals, reports, maps and charts, and trade catalogs. English, French, German, Spanish, Italian, and Russian language sources are included.

The material is accessible for on-site reference, and some interlibrary loans are made. A photocopy service is available.

CARRIER RESEARCH & DEVELOPMENT CO.

Logan Lewis Library

Carrier Parkway
Syracuse, N.Y. 13201
Telephone: 463–8411 Extension 3288 (Area code: 315)

The Library has a specialized collection on air-conditioning, acoustics, chemistry, electrical engineering, thermoelectricity, electronics, heating, metallic and nonmetallic materials, mathematics, mechanical engineering, physics, refrigeration, semiconductors, ventilation, and water. Material is in English, Russian, and German.

Internally generated technical reports are not available to the public. Other material is available to Syracuse University students and to local scientists for on-site reference. Requests from other sources are considered individually, and loans are made occasionally on this basis.

CARUS CHEMICAL CO.

Permanganate Information Service

1375 Eighth Street
La Salle, Ill. 61301
Telephone: 223–1500 (Area code: 815)

The Company's Permanganate Information Service collects all published information pertaining to manganates and permanganates. This includes chemical, physical, biological, physiological, and medical data, as well as industrial applications. The collection consists primarily of periodicals, abstract journals, books, technical and scientific data, and patents. It also contains Government reports, industrial literature, project or administrative data, and technical correspondence. Sources are in English, French, and German.

Upon request, the Service supplies information on any subject matter pertaining to manganates and permanganates, except proprietary information. Technical evaluations are made in the field of industrial applications, such as municipal, industrial and domestic H_2O treatment; bleaching of oil and waxes; descaling of metals and alloys; industrial organic oxidation; and air and gas purification. For consulting services regarding such applications, fees are charged according to services rendered. The collection is accessible for direct use by appointment only. Photocopies of holdings are available at cost.

CASE INSTITUTE OF TECHNOLOGY

10900 Euclid Avenue
Cleveland, Ohio 44106
Telephone: 795–1000 Extension 481 (Area code: 216)

The Institute's library is primarily for the use of the students, staff, and faculty and is accessible to others only through interlibrary loan. Holdings cover astronomy; chemistry; mathematics; physics; metallurgy; chemical, electrical, civil and mechanical engineering; history of science; social sciences; management; and operations research. Languages represented are English, French, German, Spanish, Italian, and Russian.

CEDARS OF LEBANON HOSPITAL

4833 Fountain Avenue
Los Angeles, Calif. 90029
Telephone: 662–9111 (Area code: 213)

The Hospital's medical library provides coverage in biology, biochemistry, medical history, cell research, physiology, and psychiatry. Books, journals, films, and charts, including German and Polish literature, comprise the collection. Translation service in German and Polish is available.

The library is accessible to the public for on-site reference; loans are made without charge.

CELANESE CORPORATION OF AMERICA

Celanese Chemical Co.

Post Office Box 8
Clarkwood Road
Clarkwood, Tex. 78348
Telephone: 945–2343 (Area code: 512)

The Clarkwood Technical Library has a collection of books, journals, reports, and patents relating to organic and physical chemistry, especially hydrocarbon oxidation, the isolation of pure products from hydrocarbon oxidation, and the manufacture of derivatives therefrom. English, Russian, Czech, Italian, Spanish, French, and German sources are represented.

Information services for other than Corporation employees are provided solely through interlibrary loans. A weekly patent abstract list is issued, which includes a tabulation of accessions of books, journals, reports, and other acquisitions. The holdings of the Library are listed in *Union List of Scientific Serials in the Corpus Christi Area,* compiled by the Library.

Celanese Polymer Co.

160 Terminal Avenue
Clark, N.J. 07066
Telephone: 381–4400 (Area code: 201)

The Company library acquires and indexes scientific and technical information to support in-house research on polymers and plastics. Books, journals, and reports comprise the collection.

Reference and document services are limited to employees. Material is available to others only on loan.

Summit Research Laboratories

Post Office Box 1000
Morris Court
Summit, N.J. 07901
Telephone: 273–6600 (Area code: 201)

The technical information section of the Summit Research Laboratories is intended for the use of company staff, but outsiders may use the collection by appointment. Holdings consist of books, journals, reports, data, and films and photos relating to plastics, polymer chemistry, organic chemistry, textiles, chemical engineering, chemicals, and polymer physics. Language input is English, Russian, Italian, Spanish, French, and German. Reference, translating, and document services are furnished.

Publications issued include the semimonthly *Review of Current Technical Literature,* the weekly *Patent Bulletin,* and the monthly *List of Internal Company Reports.*

CENTER FOR APPLICATIONS OF SCIENCE AND TECHNOLOGY, *See* WAYNE STATE UNIVERSITY

CENTER OF ALCOHOL STUDIES, *See* RUTGERS—THE STATE UNIVERSITY

CHARGED-PARTICLE CROSS SECTION INFORMATION CENTER, *See* OAK RIDGE NATIONAL LABORATORY

CHARITABLE, EDUCATIONAL AND SCIENTIFIC FOUNDATION, INC.

330 East Lakeside Street
Madison, Wis.
Telephone: 256–3101 (Area code: 608)

Established by the State Medical Society of Wisconsin, the Foundation provides medical and scientific research grants; sponsors postgraduate and public education programs in medicine and public health; and acquires books, historical data, artifacts, photographs and other memorabilia concerning physicians, and medical and scientific stamps. It also administers the Museum of Medical Progress at Prairie du Chien, Wis.

Results of special surveys relating to teaching resources, health education, and health in particular areas of the State are available. The stamp collection is available for loan. Photocopies of material are provided at cost.

DR. CHARLES E. KRAUSZ

911 West Lehigh Avenue
Philadelphia, Pa. 19133
Telephone: 229–4426 (Area code: 215)

Dr. Krausz has a private literature collection on foot problems, chiropody, podiatry, and boots and shoes. The following American and British journals have been indexed from 1907 to 1957: *Pedic Items, Chiropody Record, Podiatrist, Journal of the National Association of Chiropodists, Clinical Journal of Chiropody, Chiropodist, British Chiropody Journal, Northern Chiropodist,* and *Chiropody Practitioner.* There is a collection of books on chiropody and feet dating back to 1784. Reference services are provided without charge, except for cost of copying material over 2 pages in length.

CHAS. PFIZER & CO., INC.

Medical Research Laboratories

Eastern Point Road
Groton, Conn.
Telephone: 445-5611 (Area code: 203)

The Laboratories acquire and evaluate material on organic chemistry, pharmacology, mycology, biochemistry, botany, fermentation, antibiotics, vitamins, drugs, endocrinology, pathology, agricultural chemistry, clinical and veterinary medicine, isotope chemistry, and bacteriology. The collection of books, journals, data, and patents includes sources in English, Russian, Italian, Spanish, French, and German.

Use of the holdings is generally limited to the technical and research staff of the Company, but other scientists and research workers may be granted access by special permission.

CHEMICAL ABSTRACTS SERVICE, *See* AMERICAN CHEMICAL SOCIETY

CHEMICAL INSECTICIDE CORP.

30 Whitman Avenue
Metuchen, N.J. 08841
Telephone: 549-2300 (Area code: 201)

A commercial institution, the Corporation makes information available on aquatic plants and animals, herbicides, mosquito control, tree diseases and chemicals, fish toxicants, marine chemicals, and fungicidal chemicals. Fees for reference and consulting services are determined individually.

Bioaquatic Reports, published at frequent intervals, may be obtained at no charge.

CHEMICAL PROPULSION INFORMATION AGENCY, *See* JOHNS HOPKINS UNIVERSITY

CHEMICAL RUBBER PUBLISHING CO.

2310 Superior Avenue
Cleveland, Ohio 44114
Telephone: 781-8330 (Area code: 216) TWX: CV312

The Chemical Rubber Publishing Co. compiles tabular data in mathematics, physics, and chemistry. It utilizes contributors and collaborators located at universities and industrial research laboratories who search and evaluate English, French, German, and Hebrew language sources.

The following publications may be purchased: *Handbook of Chemistry and Physics,* annual; C.R.C. *Standard Mathematical Tables,* 12th edition; *Mathematical Tables from the Handbook of Chemistry and Physics,* 11th edition; *Tables for Identification of Organic Compounds,* 2d edition; and *Handbook of Mathematical Tables,* 2d edition.

All these publications are copyrighted, but requests for permission to reproduce tables are usually granted without the payment of a fee.

CHEMICAL THERMODYNAMIC PROPERTIES CENTER, *See* TEXAS A & M UNIVERSITY

CHEMINEER, INC.

Post Office Box 1000
Dayton, Ohio 45401
Telephone: 253-8881 (Area code: 513)

This commercial firm maintains a specialized library on fluid agitation, mixing, agitators, mixing machinery, and impellers. Books, journals, reports, patents, and data comprise the holdings. Language sources are English, Spanish, and French.

The collection is available for on-site use by noncompetitor members of the technical community. Technical questions are answered at no cost. Consulting service is provided free to potential clients, and is available to others for a fee. Photocopies of translations and other publications not generally available are supplied without charge. Company publications, including reprints of published papers and state-of-the-art reports are also distributed without charge.

CHEMINFORM INSTITUTE

10 Columbus Circle
New York, N.Y. 10019
Telephone: 586-6380 (Area code: 212)

The Institute maintains a file of trademarks, which includes registered, unregistered, common, trivial, foreign, scientific, and technological names of substances used in the chemical and pharmaceutical fields and in processing materials such as alloys, agricultural specialties, dyes, food product ingredients, metals, lubricants, cosmetics, plastics, solvents, surface-active agents, textile specialties, waxes, construction materials, coatings, and catalysts. In many cases, the chemical composition or active ingredients, use of the product, and name of the manufacturer are given. The Institute is international in scope, serving foreign countries in addition to the United States, and drawing

2

on material in the languages of Europe, Asia, Africa, and Central and South America. There are over 400,000 entries of names, definitions, and related data.

In answer to telephone and letter inquiries, the composition, formula, or active ingredient is supplied for substances for which the generic or trade name is given. Searches are performed of chemical and related trademarks registered with patent offices. The Institute also originates, and checks the originality of, new names suitable as trade names. There are published fees for these services.

THE CHEMURGIC COUNCIL (The Council for Agricultural and Chemurgic Research)
350 Fifth Avenue
New York, N.Y. 10001
Telephone: 524–0153 (Area code: 212)

The Council is an association of scientists, engineers, and executives working in industry, Government, and higher education toward progress in the industrial utilization of agricultural products. Its technical advisory committee maintains a library of books, journals, Government reports, industrial literature, data, patents, and technical correspondence pertaining to profitable agricultural waste utilization, upgrading of agricultural produce and further industrial uses of agricultural crops and materials in general relating to chemurgic operations, and new industrial crops patterned to industry's specifications and needs.

In response to requests, the committee identifies and locates firms and specialists in specific fields related to chemurgy, suggests and provides data on applications of raw and processed materials, and advises on materials suitable for specific applications. Reference service is provided and bibliographies prepared on request. Material is accessible for on-site examination and may be borrowed by members, and others by special arrangements. Photostat copies are available at cost.

The *Chemurgic Digest,* the official journal of the Council, may be obtained on subscription.

CHLORINE INSTITUTE, INC.
342 Madison Avenue
New York, N.Y. 10017
Telephone: 682–4324 (Area code: 212)

The Institute is a trade association which coordinates industry efforts and experience and furnishes information on specialized problems pertaining to the production and use of chlorine, such as safety, transportation, regulations and legislation, equipment, containers, statistical data, engineering and design, and specifications and drawings. It effects liaison with Federal and other regulatory bodies and with such trade and professional groups as the Compressed Gas Association, the Association of American Railroads, and the American Standards Association.

Consultation without charge is available to chlorine producers and consumers and other interested persons. The *Chlorine Manual,* as well as pamphlets, engineering and design recommendations, specifications and drawings are available for sale. These publications are continually reviewed and revised and may be ordered by number from a list of *Available Pamphlets and Drawings* obtainable from the Institute.

CLIMAX MOLYBDENUM CO.
1270 Avenue of the Americas
New York, N.Y. 10020
Telephone: 757–9700 (Area code: 212)

An affiliate of American Metal Climax, Inc., the Company has established an information center for the dissemination of material on molybdenum, tungsten, vanadium, and products containing one or more of these elements. Its holdings are from English, German, French, Japanese, and Russian sources. Reference and consulting services are available to all without charge.

Abrasion Resistant News is issued annually; *Molysulfide Newsletter* and *Tungsten News* appear quarterly. All are complimentary. Technical reports, standards and specifications, state-of-the-art reviews, bibliographies, and data handbooks are also published.

COAST AND GEODETIC SURVEY. *See* U.S. DEPARTMENT OF COMMERCE

COAST GUARD, *See* U.S. DEPARTMENT OF THE TREASURY

COBALT INFORMATION CENTER, *See* BATTELLE MEMORIAL INSTITUTE

COFFEE BREWING INSTITUTE, INC.
120 Wall Street
New York, N.Y. 10005
Telephone: 944–5920 (Area code: 212)

The Institute disseminates information on the production, manufacturing, research, and promotion of coffee as a beverage. Material in its reference collection deals with the science and technology of coffee, particularly with respect to manufacturing for direct consumer use; agricultural aspects; chemical analysis; particle size and color measurement; roasting, grinding, and packaging; chemical changes; and the preparation of the beverage. In addition to the reports, films, and data in the collection, there are a patent file and reference lists.

The collection is available for on-site use. Reference and document services are provided. Several 16-mm films, some with French or Spanish narration, may be borrowed or purchased. Technical consultation services are offered for a fee.

A number of pamphlets, technical reports, and reprints of articles on research findings by CBI members are sold by the Institute.

COLGATE-PALMOLIVE CO.

909 River Road
New Brunswick, N.J. 08904
Telephone: 846–1212 Extension 276 (Area code: 201)

The Company's information center maintains a specialized collection of books, journals, reports, and data on soaps, detergents, dentifrices, cosmetics, fats and oils, and glycerines. It is concerned with organic, inorganic, physical, and colloid chemistry; biochemistry, including collagen; chemical technology; and biological sciences. Languages represented are English, French, and German.

The center is for the use of Company employees, but other libraries and authorized individuals of the scientific and technical community may make use of the collections and various services not concerned with proprietary interests. All reference inquiries should be submitted in writing whenever possible. Answers to technical questions are given by drawing upon the available literature and the technical knowledge of laboratory staff members. There is no fee. Photocopies of resources are also provided without charge. Interlibrary loans are available.

Publications include *Current Technical Information,* a biweekly abstract bulletin of current journal literature, and *Scientific and Technical Meetings,* a monthly list of forthcoming events.

COLLEGE OF PHYSICIANS OF PHILADELPHIA

19 South 22d Street
Philadelphia, Pa. 19103
Telephone: 563–6626 (Area code: 215)

A professional medical society, the College maintains a library of 220,000 books and journals and over 320,000 reports, theses, pamphlets, reprints and microfilms. It receives over 2,600 medical journal subscriptions and adds over 1,500 books and monographs a year.

The Samuel D. Gross Library of Surgery and the Packard-Krumbhaar Alcove of Medical History constitute special collections. Important subject fields covered are biochemistry; psychology; works by and about William Harvey; 16th and 17th century works on generation, and on the plague and other epidemics; 18th century European and American medical and scientific periodicals; medical and scientific incunabula; medical school theses from the 17th century to date; medical history, biography, and bibliography; autographs; inoculation; dermatology; ophthalmology; neurology; psychiatry; surgery; pediatrics; obstetrics; gynecology; anatomy; radiology; medical dictionaries; and portrait catalogs and medical art. All major languages and a number of Oriental and other languages are represented. The medical museum, which is part of the College, has collections of preserved specimens, skulls, and surgical instruments of historical significance.

The library is open to the public without charge. Staff specialists help inquirers on site, by telephone, or by correspondence in the identification and locating of articles, authors, references, and documents. Fellows of the College have borrowing privileges and arrangements may be made for other professional scientific, educational, and industrial users for a fee. Interlibrary loans are available.

A medical documentation service, maintained by the library, offers a scanning service tailored to the client's specifications, prepares bibliographies and abstracts, and makes translations from all major languages. Fees are charged for these services.

Publications include *Transactions & Studies of the College of Physicians of Philadelphia,* a quarterly; *Book List;* and *Fugitive Leaves,* a newsletter which appears 10 times a year.

COLLEGE PARK METALLURGY RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

COLORADO SCHOOL OF MINES RESEARCH FOUNDATION, INC.

Post Office Box 112
Golden, Colo. 80402
Telephone: 279-2581 (Area code: 303)

The Research Foundation carries out research projects for the mineral industry. It has two information activities: A center for information on rock physics, dealing primarily with collecting and evaluating information describing the behavior of rocks when subjected to various physical stimuli; and a prospector service operated for the State of Colorado to identify rocks and minerals and to make available information to assist the mining industry. Technical questions are answered without charge.

A bimonthly abstract journal, *Colorado School of Mines Mineral Industries Bulletin,* may be obtained by subscription.

COLORADO STATE UNIVERSITY

University Libraries

University Campus
Fort Collins, Colo. 80521
Telephone: 491-6626 (Area code: 303)

Holdings consist of books, journals, reports, patents, films, and photos with emphasis on veterinary medicine, nutrition, biochemistry, forestry, agriculture, botany, chemistry, genetics, entomology, home economics, irrigation, and hydraulic engineering.

The collections are maintained primarily for CSU students, faculty, and research personnel, and staff members of cooperating agencies on campus and in the State of Colorado. Generous exceptions are made, however, and reference and loan services are generally available also to others.

COLOR ASSOCIATION OF THE UNITED STATES, INC.

200 Madison Avenue
New York, N.Y. 10016
Telephone: 685-5881 (Area code: 212)

The Association serves as a center for information on colors, their standardization, and the forecasting of their use throughout industry 12 to 18 months ahead. Government standards are supplied without restrictions. Color forecasts, however, are provided to members only.

COLUMBIA UNIVERSITY

Conditions governing the use of the Columbia libraries listed below are the same in all cases. Members of Columbia University and affiliated institutions may borrow circulating materials and make full use of reference and document services. On-site access to materials unique to the region may be granted to other researchers on request. Reference questions submitted in person or by telephone are answered when the material is available. Interlibrary loans are arranged through regular channels subject to internal restrictions. Material published since 1960 is not normally loaned to other libraries.

Biological Sciences Library

914 Schermerhorn Hall
Columbia University
New York, N.Y. 10027
Telephone: 865-4000 Extension 520 (Area code: 212)

The Library consists of books and current technical journals on all aspects of the biological sciences, with the exception of clinical medicine, including zoology, botany, genetics, vertebrate and invertebrate physiology, cytology, histochemistry, and biochemistry. Languages represented are English, Russian, Italian, Spanish, French, and German.

Chemistry Library

454 Chandler
Columbia University
New York, N.Y. 10027
Telephone: 865-4000 Extension 770 (Area code: 212)

The Library contains material on organic and inorganic chemistry, chemical physics, chemical thermodynamics, enzyme chemistry, quantum mechanics, radiochemistry, chemistry of natural products, chemistry of alkaloids, isotopes in inorganic chemistry, and synthetic methods in organic chemistry.

Engineering Library

422 Seeley W. Mudd Building
Columbia University
New York, N.Y. 10027
Telephone: 865-4000 Extension 2437 (Area Code: 212) TWX 212-640-5108

The holdings of the Library pertain to aeronautics; chemical, civil, electrical, industrial, and mechanical engineering; mining; and metallurgy. The Library is a Regional Technical Report Center for U.S. Government reports.

Geology Library and University Map Room

601 Schermerhorn Hall
Columbia University
New York, N.Y. 10027
Telephone: 865–4000 Extension 436 (Area code: 212)

The Geology Library has books, journals, pamphlets, reports, and early treatises on geology, meteorology, soils, geophysics, cartography, physical geography, hydrology, geochemistry, crystallography, mineralogy, and oceanography.

The map room contains complete series of the geological and topographical maps published by the U.S. Geological Survey and the charts of the U.S. Coast and Geodetic Survey, as well as many of the equivalent series published by foreign governments. Most of the map collection is in the fields of geology and physical geography.

Geoscience Library

Lamont Geological Observatory
Torrey Cliff
Palisades, N.Y. 10964
Telephone: 359–2900 (Area code: 914)

The Library acquires books and journals relating to the earth sciences, specifically physical and biological oceanography, solid earth geophysics, and general geochemistry, including radioactive dating.

Mathematics and History of Science Library

303 Mathematics Building
Columbia University
New York, N.Y. 10027
Telephone: 865–4000 Extension 2460 (Area code: 212)

Holdings consist of books, journals, and lecture notes on pure mathematics and some areas of applied mathematics, such as mathematical statistics and mathematical physics. There is a special reference collection of mathematical tables.

A science collection, containing materials on the history and philosophy of science and interdisciplinary publications, is housed with the mathematics library. Less-used materials in all areas of science and technology are also in this collection.

Medical Library

630 West 168th Street
New York, N.Y. 10032
Telephone: 579–3688 (Area code: 212)

The Medical Library has books, journals, reports, films and photos, data and nonprinted materials dealing with anatomy, biochemistry, microbiology, pathology, pharmacology, psychology, biophysics, histology, cytology, human genetics, dermatology, neurology, obstetrics, gynecology, radiology, surgery, physical medicine, rehabilitation, pediatrics, anesthesiology, internal medicine, neurosurgery, orthopedic surgery, preventive and administrative medicine, psychiatry, urology, ophthalmology, oncology, cardiovascular system, and dentistry. There is a special collection on plastic surgery. Literature is in English, Russian, Japanese, Italian, Spanish, French, and German.

The monthly *Recent Acquisitions List* and *Science Reference Notes*, prepared quarterly in collaboration with other Columbia science libraries, are distributed free on request.

Physics Library

801 Pupin Building
Columbia University
New York, N.Y. 10027
Telephone: 865–4000 Extension 405 (Area code: 212)

The collection contains books and journals on physics and astronomy, including mechanics, electricity and magnetism, heat and thermodynamics, atomic physics, optics and spectroscopy, nuclear physics, observational astronomy, celestial mechanics, and astrophysics.

Psychology Library

815 Schermerhorn Hall
Columbia University
New York, N.Y. 10027
Telephone: 865–4000 Extension 534 (Area code: 212)

The Library contains books and periodicals for the study of psychology, with stress on physiological psychology, experimental psychology, sensory perception, and the psychology of learning. Some material on abnormal psychology and personality is represented. Journals in English, Russian, Italian, Spanish, German, and French are received.

THE COMBUSTION INSTITUTE

Union Trust Building
Pittsburgh, Pa. 15219
Telephone: 391–1366 (Area code: 412)

A nonprofit society with an international membership, the Institute is concerned with all aspects of combustion, flame, and explosion phenomena. Its primary purpose is to organize a biennial symposium, with subsequent publication of contributed papers and attendant discussion.

Questions are answered without charge by officers or members; in some cases referrals are made to other organizations or individuals.

Combustion and Flame, published quarterly, is available by subscription. Copies of *Symposium (International) on Combustion,* issued biennially, may be purchased individually.

COMPUTER CONCEPTS, INC.

8555 16th Street
Silver Spring, Md. 20910
Telephone: 587–4710 (Area code: 301)

A commercial consulting firm, Computer Concepts specializes in the evaluation of data processing requirements and computer systems, application and utilization of computer systems, computer programing services, management of information services, and operations research analysis. Services are available on a fee basis.

CONNECTICUT BOTANICAL SOCIETY, INC.

Osborn Botanical Laboratory
Prospect and Sachem Streets
New Haven, Conn. 06711
Telephone: 787–3131 (Area code: 203)

The Society provides information on the flora of Connecticut, with special reference to vascular plants, as well as on the use of herbicides to control vegetation on roadsides and rights-of-way with minimum damage to unobjectionable native plants. A collection of films and photos, data and plant specimens is maintained by the Society.

Reference and consulting services are furnished without charge. The collections may be consulted by members, and by others under the supervision of curators.

CONSOLIDATION COAL CO.

Information Services
Research and Development Division
Library, Pa. 15129
Telephone: 835–4400 Extension 284 (Area code: 412)

The Company has a research library of books, journals, reports, and patents on fuel technology, particularly coal, coal chemistry, and marketing. Foreign literature includes material in Russian, French, and German.

Reference, translating, and document services are available for Company use only. The library participates in interlibrary loan arrangements and makes material available to selected individuals for direct loan and on-site reference. Telephone inquiries are answered if they are specific and do not require lengthy searching.

Publications issued irregularly include an abstract bulletin, technical reports, state-of-the-art reviews, data handbooks, indexes, and translations.

CONSTRUCTION SPECIFICATIONS INSTITUTE, INC.

632 Dupont Circle Building
Washington, D.C. 20036
Telephone: 483–6645 (Area code: 202)

A national technical association, the Construction Specifications Institute is concerned with the effective preparation and utilization of specifications for the fabrication and installation of construction materials and equipment. It does not have a formal library but maintains a collection of construction specifications, excluding those concerned with the housing industry or home building.

Technical questions are answered and photocopies of documents are available. Its literature collection is not generally accessible to outsiders. Technical studies which include data pertinent to specification writing and sample guides are for sale. *The Construction Specifier,* a news journal issued 12 times a year, is obtainable on subscription. A price list of the Institute's publications is available free on request.

CONSULTING ENGINEERS COUNCIL

1155 15th Street NW.
Washington, D.C. 20005
Telephone: 462–1612 (Area code: 202)

A national federation of State and regional associations of consulting engineers, the Council confines itself to the nontechnical interests of the consulting engineer, such as professional insurance and registration; tax, labor, and business laws and regulations; personnel practices; professional ethics; fees; services to clients; and relations with others in the design professions and construction industry. The Council will attempt to answer general questions submitted by the public, students, and others besides consulting engineers. There is no fee.

Among CEC publications are the *Manual of Practice of Consulting Engineering,* the annual *Membership Directory,* which lists member firms and describes the services they offer, contract and specifications documents, compilations of recommended engineer fee schedules, and various special reports. The monthly *Newsletter* is distributed free.

CONSUMERS UNION OF THE UNITED STATES, INC.

256 Washington Street
Mount Vernon, N.Y. 10553
Telephone: 664–6400 (Area code: 914)

A nonprofit, nongovernmental organization, Consumers Union serves consumers and the public interest in a variety of ways. It tests and evaluates products through six technical divisions: Automotive, appliance, chemical, electronic, textiles, and special projects. A Public Service Department is conducting a continuing study of radioactive fallout.

Library reference literature is made available on a limited basis for on-site use under special circumstances. The library is not open to public use.

The monthly issues of *Consumer Reports,* available by subscription and at newsstands, include the enlarged December *Annual Buying Guide Issue.* The *Reports* carry product evaluations and brand ratings and, in addition, reports on health and economic matters from the consumer's point of view.

CU also publishes special booklength reports from time to time, and reprints of articles of special public interest, usually in the field of health or economics.

No services are available to business or commercial interests. Occasional special research projects or consultant activity are undertaken for governmental or nonprofit agencies. Quotations from material in part or in full require prior consent, and permission is never granted for use of material for advertising or for any commercial purpose. Limited interlibrary loans may be arranged.

COOPERATIVE STATE RESEARCH SERVICE, *See* U.S. DEPARTMENT OF AGRICULTURE

COPPER DEVELOPMENT ASSOCIATION, INC.

Chrysler Building
405 Lexington Avenue
New York, N.Y. 10017
Telephone: 867–6500 (Area code: 212)

The headquarters of CDA, an organization of copper producers and fabricators, functions as a center for information primarily about the properties, uses, and marketing of copper products as related to transportation, building construction, electrical engineering and electronics, industrial machinery and equipment, and consumer industries. Information is provided to anyone as a service.

COTTON ECONOMIC RESEARCH, *See* THE UNIVERSITY OF TEXAS

COTTONSEED PRODUCTS RESEARCH LABORATORY, *See* TEXAS A & M UNIVERSITY

THE COUNCIL FOR AGRICULTURAL AND CHEMURGIC RESEARCH, *See* THE CHEMURGIC COUNCIL

CRANBROOK INSTITUTE OF SCIENCE

Lone Pine Road
Bloomfield Hills, Mich. 48013
Telephone: 644–1600 (Area code: 313)

The Cranbrook Institute of Science is an educational institution which promotes instruction and research in the sciences. Its museum offers permanent exhibits relating to mathematics, physics, astronomy, meteorology, mineralogy, geology, biology, and anthropology. A small admission fee is charged and guide service is available. Public demonstrations in the planetarium are scheduled regularly.

The Institute's library, which is open to the public, contains holdings on general science, biology, botany, astronomy, mineralogy, and anthropology, with particular emphasis on the flora and fauna of the Great Lakes region and the culture and ethnology of the American Indian. It is a Government depository for documents from the U.S. Departments of Agriculture, Commerce, State, and Interior; the U.S. Atomic Energy Commission; the Smithsonian Institution; and the National Aeronautics and Space Administration.

A monthly *Newsletter* and the *Annual Report* are distributed free to members. A list of other Institute publications is available on request.

CREEDMOOR INSTITUTE FOR PSYCHOBIOLOGIC STUDIES

Creedmoor State Hospital
Station 60
Queens Village, N.Y. 11427
Telephone: 464–7500 (Area code: 212)

The Institute disseminates information on certain psychobiologic diseases and drugs, specifically Huntington's Chorea, progeria, chronic brain syndromes, cerebral vasorelaxant drugs, and pyridoxine. The collection consists of books, journals, reports, films and photos, and data.

On-site use of reference material is permitted, and technical questions answered, within limits of facilities and resources. Copies of reports and reprints are available on request.

CRUCIBLE STEEL COMPANY OF AMERICA

234 Atwood Street
Pittsburgh, Pa. 15213
Telephone: 683–3600 (Area code: 412)

The Crucible Steel Co. operates a technical library which serves as an information center primarily for the Process Research and Development and the Product Research and Development Laboratories of the Development Group. Library services are extended to others affiliated with the Company. Holdings consist of books, periodicals, unpublished reports, patents, Government reports and publications, slides, and in-house reports relating to stainless steels, high-temperature alloys and materials, refractory metals, magnetic materials, and titanium and titanium alloys. Some foreign periodicals in German, French, and Swedish are received, as well as several cover-to-cover translated Russian periodicals.

Information services are provided to non-Company personnel by special arrangement. Interlibrary loans are made.

Library publications include *List of Staff Publications, Technical Abstract Bulletin, Annotated Accession List of Books, Classified Book Holdings,* literature reference lists, bibliographies, and a *Library Guide.* Publications and holdings are available only on a need-to-know basis.

CRYOGENIC DATA CENTER, *See* U.S. DEPARTMENT OF COMMERCE, NATIONAL BUREAU OF STANDARDS

CYRUS WM. RICE AND CO.

15 Noble Avenue
Pittsburgh, Pa. 15205
Telephone: 921–5400 (Area code: 412)

The Company is a commercial consultant on water treatment technology, including industrial water quality control, industrial waste, analysis of water-formed deposits and their treatment, water treatment and analysis, ion exchange, zeolite softening, demineralization, coagulation, filtration, chemical cleaning, and corrosion of water and steam systems. The Company maintains its own laboratory facilities, records of analytical and operating data, complete case histories, and a library.

Services are available on either a continuing or spot fee basis.

DAIRY AND FOOD INDUSTRIES SUPPLY ASSOCIATION

1145 19th Street NW.
Washington, D.C. 20036
Telephone: 337–6464 (Area code: 202)

The Association participates in the writing of 3–A Sanitary Standards for food and dairy processing equipment and materials, in collaboration with the Dairy Industry Committee, the U.S. Public Health Service, and the International Association of Milk, Food, and Environmental Sanitarians. Information is provided on sanitary standards for food and dairy processing equipment and materials and guidelines for sanitary construction. Technical questions are answered by members of the Association or referred to specialists. Pertinent reprints of published 3–A Sanitary Standards are furnished in reply to inquiries. There are no restrictions beyond copyright limitations. The 3–A Sanitary Standards are published officially in the *Journal of Milk and Food Technology.*

DALLAS SEISMOLOGICAL OBSERVATORY, *See* SOUTHERN METHODIST UNIVERSITY

T. L. DANIELS RESEARCH CENTER, *See* ARCHER-DANIELS-MIDLAND COMPANY

DEARBORN CHEMICAL CO.

1029 West 35th Street
Chicago, Ill. 60609
Telephone: 927–5220 (Area code: 312)

The Company maintains a library to serve the needs of its administrative, laboratory, research, and sales staff. The collection of books, journals, reports, patents, trade literature, and an extensive pamphlet file pertains mainly to water treatment and corrosion. Areas included are chemistry, biology, engineering, and chemical technology.

Interlibrary loan and photocopies are available.

DEFENSE DOCUMENTATION CENTER, *See* U.S. DEPARTMENT OF DEFENSE

DEFENSE METALS INFORMATION CENTER, *See* BATTELLE MEMORIAL INSTITUTE

DELAWARE ACADEMY OF MEDICINE

1925 Lovering Avenue
Wilmington, Del. 19806
Telephone: 656–1629 (Area code: 302)

A fraternal medical association, the Academy has a library with a collection of material less than 35 years old concerning medicine and dentistry. The library is open to the public for on-site use. Material may be photocopied and interlibrary loans arranged. Bibliographies are prepared for members of the Academy, who also have loan privileges. Technical inquiries are not answered.

DELAWARE GEOLOGICAL SURVEY

University of Delaware
Newark, Del. 19711
Telephone: 368–0611 Extension 342, 420 (Area code: 302)

An information center affiliated with the University of Delaware, the Delaware Geological Survey collects information on geology, geochemistry, stratigraphy, sedimentology, hydrology, and mineral resources as related to the State of Delaware. All data are available upon request, except those currently being interpreted by the Survey.

DENVER MEDICAL SOCIETY

1601 East 19th Avenue
Denver, Colo. 80218
Telephone: 222–5817 (Area code: 303)

A library of books and journals on medicine, dentistry, and veterinary medicine is maintained at Society headquarters. There are also the Hubert W. Work collection on psychiatry, neurology, and neurosurgery, and the Herbert M. Evans collection of medical classics.

Reference, document and interlibrary loan services are available to physicians in Montana, Nevada, New Mexico, Utah, and Wyoming and to members of the Denver Medical Society, the Colorado Medical Society, the Colorado Dental Association, and the Denver Veterinary Association. Guest privileges are extended to other medical groups, paramedical groups, and attorneys under certain conditions. There is a photocopy fee to nonmembers of the Society.

The monthly *Denver Medical Bulletin,* incorporating the *Library Quarterly,* is available on subscription.

DENVER MINING RESEARCH CENTER AND COAL RESEARCH LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

DENVER WILDLIFE RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE

DERIVATION AND TABULATION ASSOCIATES, INC.

43 South Day Street
Orange, N.J. 07050
Telephone: 673–8030 (Area code: 201)

A technical information center, D.A.T.A. collects, organizes, and disseminates data on worldwide commercially available transistors, semiconductor diodes and silicon-controlled rectifiers, semiconductor device mounting hardware, and microwave tubes.

The following technical reference tabulations, organized and cross-referenced by both electrical characteristics and type number, are available by subscription: *D.A.T.A. Transistor Tabulation,* issued in complete semiannual editions with a supplement to each; *D.A.T.A. Semiconductor Diode & SCR Tabulation* and *D.A.T.A. Microwave Tube Tabulation,* both issued in complete semiannual editions; and *D.A.T.A. Semiconductor Device Mounting Hardware Tabulation,* issued in one complete annual edition. Also available by subscription, *Transistor Data Sheets on Microfilm by D.A.T.A.* encompasses all transistor data sheets published by manufacturers throughout the world. Organized in type number sequence, and alphabetically by manufacturers of the same type number, *TDSOM* is issued in complete semiannual editions with bimonthly cumulative supplements. This service is available in 16-mm cartridges, 16-mm rolls, or 4 by 6 inch microfiche negative cards.

DESERT RESEARCH INSTITUTE, *See* UNIVERSITY OF NEVADA

DISTILLED SPIRITS INSTITUTE, INC.

1132 Pennsylvania Building
425 13th Street, NW.
Washington, D.C. 20004
Telephone: 628–3544 (Area code: 202)

The Institute, a trade association, compiles statistical, legal, and other information for general publication and for use by members. The headquarters library provides consulting and reference service on the statistical and regulatory aspects of the industry, including production, areas of sale, laws governing sale and advertising, revenues, prohibition, and taxes. Scientific aspects are not stressed. Availability of information services depends on the source of the request; some services are restricted to members.

The *Summary of State Laws and Regulations,* issued semiannually, may be purchased. Other publications include *Apparent Consumption of Distilled Spirits* and *Public Revenues from Alcoholic Beverages,* both issued annually; *Annual Review of Monopoly States;* and the *Annual Report.*

DoALL CO.

254 North Laurel Avenue
Des Plaines, Ill. 60016
Telephone: 824–1122 (Area code: 312)

The Company library collects, analyzes, and indexes books, films, photos, data, and nonprinted material on machine tool operation and application, including cutting tools, gaging equipment, grinders, band saws, planers, boring and drilling tools, milling machines, surface plates, machinability of metals, metallurgy, and metrology. Literature is acquired and distributed in English, Italian, Spanish, French, and German. Materials are available for on-site reference, loan, or distributed free, depending upon the material desired and the source of the request. Vocational films in color are obtainable free on loan.

A free testing service is provided by the DoAll Demonstration-Test Center in sawing, filing, surface grinding, and precision slicing, particularly as related to Company-produced machinery.

The Company also sponsors a historical information center with a museum containing basic tools from the stone age, early steam engines and boats, and models of a variety of original machine tools. Educational booklets are for sale at cost.

The *DoAll Digest,* published quarterly, is distributed free.

DOTY LABORATORIES

Mail:
P.O. Box 7498
North Kansas City, Mo. 64116
Location:
1435 Clay Street
North Kansas City, Mo.
Telephone: 471–8580 (Area code: 816)

This commercial laboratory provides consulting service in all areas of cereal analysis, particularly wheat crop quality survey, pesticide residue analysis, vitamin assay, and feed analysis.

Fees are determined individually. All analytical reports are on samples submitted by industry or Government and become their property.

DOUGLAS AIRCRAFT CO., INC.

Douglas Corporate Library

3000 Ocean Park Boulevard
Santa Monica, Calif. 90405
Telephone: 399–9311 (Area code: 213)

Missiles and Space Systems Division Library
3000 Ocean Park Boulevard
Santa Monica, Calif.

Product Support Research and Development Library
3000 Ocean Park Boulevard
Santa Monica, Calif.

Aircraft Technical Library
3855 Lakewood Boulevard
Long Beach, Calif.

Space Systems Center Library
5301 Bolsa Avenue
Huntington Beach, Calif.

Astropower Laboratory Library
2121 Paularino Avenue
Newport Beach, Calif.

Charlotte Plant Library
1820 Statesville
Charlotte, N.C.

The libraries within the Douglas Co. participate in a corporate mechanized library program. Information on all aspects of the aeronautical and aerospace sciences is recorded on magnetic tape for subject search by computers. Emphasis is placed on exhaustive indexing of Douglas-generated documents. All documents received are recorded on tape and information retrieval is augmented by acquisitions of tapes and microforms from the National Aeronautics and Space Administration. The libraries remain autonomous divisional entities but operate under mutually established regulations. A common dictionary controls the vocabulary of indexing terms, and all library tapes may be searched on demand.

The facilities are maintained primarily for the use of Douglas engineers and scientists, but on-site reference is permitted to others. Interlibrary loans are governed by security and proprietary interests.

DOW CORNING CENTER FOR AID TO MEDICAL RESEARCH

South Saginaw Road
Midland, Mich. 48642
Telephone 832–2371 (Area code: 517)

The purpose of the Center is to serve the medical profession on a nonprofit basis by providing technical aid in the use of silicones in medicine and surgery, acting as a clearinghouse for information about medical uses of silicones, and cooperating in organosilicon chemical research. Pertinent reports, data, and nonprinted material are acquired from all available sources, including foreign publications in German, French, Italian, Spanish, and Russian.

The Center answers questions, provides samples, and furnishes technical assistance in the fabrication of materials or devices using silicone. Information services are available to bona fide researchers.

The *Bulletin of the Dow Corning Center for Aid to Medical Research,* published quarterly, is circulated free under controlled distribution.

DRY COLOR MANUFACTURERS' ASSOCIATION

460 Bloomfield Avenue
Montclair, N.J. 07042
Telephone: 746–5383 (Area code: 201)

The headquarters of this trade association disseminates information on color pigments and their toxicity, import statistics, and legislation of interest to pigment manufacturers. Technical inquiries are answered directly or through referral. Restrictions on services provided depend upon the nature of the inquiry.

DUKE UNIVERSITY

Unless otherwise indicated, materials in the libraries of Duke University are available for on-site use and interlibrary loans are made. Requests for interlibrary loan should be addressed to Interlibrary Loan Librarian, Duke University Library, Durham, N.C.

Biology-Forestry Library

Duke University
Durham, N.C. 27702
Telephone: 681–0111 Extension 2381 (Area code: 919)

The Library contains books, journals, reports, and maps and charts relating to botany, bacteriology, ecology, eugenics, cytology, mycology, zoology, embryology, ornithology, genetics, entomology, physiology, forestry, and meteorology. Literature is drawn from sources in English, Russian, Italian, Spanish, French, and German.

Chemistry Library

Duke University
Durham, N.C. 27702
Telephone: 681–0111 Extension 3629 (Area code: 919)

Subjects covered are nuclear chemistry, physical chemistry, thermodynamics, polymer chemistry, chemical physics, and theoretical chemistry. The books, journals, and reports in the collection include literature in English, Russian, Italian, Spanish, French, and German.

College of Engineering Library

Duke University
Durham, N.C. 27702
Telephone: 681–0111 Extension 2371 (Area code: 919)

The Library supports the University's programs in civil, electrical, and mechanical engineering. The collection consists of books, journals, reports, maps, and charts and includes literature in all major languages.

Duke Medical Center

Duke University
Durham, N.C. 27702
Telephone: 681–0111 Extension 3505 (Area code: 919)

The Center maintains a library in the basic and clinical medical sciences. Publications are in English, Russian, Italian, Spanish, French and German. There is a special collection on the history of medicine. A file of the *Psychoanalytic Index* is maintained.

Questions from the scientific community are answered and reference assistance provided. The materials are available to the public for on-site use only. Interlibrary loan service is provided.

Marine Laboratory

Duke University
Beaufort, N.C. 28516
Telephone: 728–4488 (Area code: 919)

The Laboratory conducts research in oceanography, marine ecology, marine zoology, and marine parasitology. Its supporting library has a collection of books, journals, reports, and maps and charts in these fields, including literature from Russian, Italian, Spanish, French, and German sources. Use of the holdings is restricted to staff, students, and researchers, but interlibrary loans are available to others. Researchers interested in carrying out studies at the Laboratory are requested to make advance arrangements through the Assistant Director for Research.

Mathematics-Physics Library

Duke University
Durham, N.C. 27702
Telephone: 681–0111 Extension 2821 (Area code: 919)

The library contains publications in all major languages on electronics, theoretical and low-temperature physics, quantum theory, nuclear physics, statistics, algebra, geometry, and topology.

Regional Center for the Study of Aging

Duke University
Durham, N.C. 27702
Telephone: 681–0111 Extension 3416 (Area code: 919)

Sponsored by the National Institutes of Health, the Center promotes and conducts research on geriatrics and gerontology, specifically on the effect of aging on the central nervous system and phychological, physiological, and social factors related to the aging process. The Center's literature and data collection is accessible for direct use. Reprints of publications are available on request without charge. The biennial *Proceedings of the Duke University Council on Gerontology* may be purchased.

DUNLAP & ASSOCIATES, INC.

Box 1106
Darien, Conn. 06821
Telephone: 655–3971 (Area code: 203)

A library is maintained by this research laboratory with holdings on human engineering, including applied and experimental psychology, personnel subsystems, equipment design, and anthropometrics, systems design and analysis, and operations research.

Library service is intended primarily for the Company staff; however, use of the collection and reference services are available to others as time, policy, and security measures permit. Some interlibrary loans may be arranged.

DUODECIMAL SOCIETY OF AMERICA, INC.

20 Carleton Place
Staten Island, N.Y. 10304
Telephone: 442–0010 (Area code: 212)

The Society is a voluntary, nonprofit organization whose purpose is to conduct research and educate the public in mathematics, with particular relation to the use of 12 as a base in numeration, weights and measures, and other branches of pure and applied science. Reference and consulting services are provided without charge.

The *Duodecimal Bulletin*, published quarterly, is for sale. Educational material is distributed to schools and individuals on request.

E. I. DU PONT DE NEMOURS & CO., INC.

Technical Library

Room 3155, Du Pont Building
Wilmington, Del. 19898
Telephone: 774–4067 (Area code: 302)

The Library collection provides coverage in agriculture, chemistry and chemical engineering, physics, physical chemistry, dyes, explosives, fibers and films, paints and lacquers, photo products, polymer science, plastics and pigments. Publications in all major languages are acquired. On-site reference use is extended to non-Company personnel at the discretion of the librarian. Interlibrary loans are made.

Technical Library—Chestnut Run Branch

E. I. du Pont de Nemours & Co., Inc.
Wilmington, Del. 19898
Telephone: 774–1000 (Area code: 302)

The collection of books, journals, and films and photos pertains to textile fibers and fabrics, polymer science, and physics. Material is drawn from sources in all major languages. Reference use is restricted to du Pont employees, but interlibrary loans are provided.

Technical Library—Louviers Branch

E. I. du Pont de Nemours & Co., Inc.
Wilmington, Del. 19898
Telephone: 774–1000 (Area code: 302)

Holdings cover all aspects of engineering and include publications in all major languages. Reference services are available only to du Pont personnel; on-site use is extended to others at the discretion of the librarian. Interlibrary loans are available.

DYNATRONICS, INC.

P.O. Box 2566
Highway 17–92 North
Orlando, Fla. 32802
Telephone: 838–6161 (Area code: 305) TWX: 838–1466

The library of this private corporation has a specialized collection of books, journals, and reports on electrical engineering, mechanical engineering, physics, and mathematics. Reference service is available, and interlibrary loans can be arranged.

EATON MANUFACTURING CO.

Research Center

26201 Northwestern Highway
Southfield, Mich. 48076
Telephone: 356–8550 (Area code: 313)

The Center maintains a library to support the Company's research and development program. The collection consists of books, journals, reports, patents, films and photos, data, and nonprinted material. Subject emphasis is on automotive engineering, transportation equipment, metallurgy, and industrial engineering. Free reference service is furnished. The materials, except internal reports, are available for loan.

ECONOMIC RESEARCH SERVICE, *See* U.S. DEPARTMENT OF AGRICULTURE

EDISON ELECTRIC INSTITUTE

750 Third Avenue
New York, N.Y. 10017
Telephone: 986–4100 (Area code: 212)

A trade association of investor-owned electric companies, EEI publishes information on electricity, electric utilities, electricity in the kitchen and home, and industrial and agricultural uses of electricity, lighting, and power. A reference library on subjects pertaining to the electric light and power industry is maintained.

Publications include the *EEI Bulletin*, the *Weekly Electric Power Output*, *Farm Electrification*, the *Monthly Electrical Research Statistics*, the *Statistical Yearbook*, standards and specifications, reports, and handbooks. A catalog is free on request.

ELECTRON DEVICES DATA SERVICE, *See* U.S. DEPARTMENT OF COMMERCE, NATIONAL BUREAU OF STANDARDS

ELECTRONIC COMPONENT RELIABILITY CENTER, *See* BATTELLE MEMORIAL INSTITUTE

ELECTRONIC PROPERTIES INFORMATION CENTER, *See* HUGHES AIRCRAFT COMPANY

ENGELHARD INDUSTRIES, INC.

497 Delancy Street
Newark, N.J. 07105
Telephone: 242–2700 (Area code: 201)

The Research and Development Division of the Company has a library on the platinum group metals, including platinum, palladium, rhodium, ruthenium, iridium, and osmium, gold, silver, and industrial diamonds. Books, journals, reports, patents, films and photos, and data are acquired, including current publications in English, Russian, and German.

Access to the collection is permitted for on-site use. Reference and photocopying services are provided. Interlibrary loans are made on a limited scale.

ENGINEERING SOCIETIES LIBRARY

345 East 47th Street
New York, N.Y. 10017
Telephone: 752–6800 (Area code: 212)

Sponsored by the United Engineering Trustees, Inc., and supported by 12 engineering societies, the Library has a collection of books, journals, abstracts, catalogs, bibliographies, films, Government reports, and unpublished manuscripts covering all branches of engineering and related physical sciences: Chemical, civil, electrical and electronic, marine and naval, illuminating, industrial, and mechanical engineering; aerospace sciences; rockets and missiles; nuclear technology; metallurgy and metallography; welding; mining; shipbuilding; petroleum technology; computers and instrumentation; engineering materials; geology; geophysics; history of technology; and engineering as a profession.

Brief reference service is available to anyone without charge. Only members of supporting societies have borrowing privileges. Literature searches are made for a fee, and specialized bibliographies, individually priced, are prepared on request. Photoprints and microfilms may be obtained at published rates.

Some 60 motion picture films of research data in fluid mechanics are available for loan. A catalog of this collection may be purchased. Another special collection consists of about 20,000 unpublished papers of the sponsoring societies and some other engineering societies. The Library also does translations into English at rates based on the language and the number of words translated. Quotations for translations from German, French, Italian, Spanish, Russian, Dutch, Portuguese, Swedish, Japanese, Chinese, Finnish, and other languages are available on request.

The complete subject-classified card catalog and index of the Library is to be published in a set of 13 volumes by G. K. Hall & Co., Boston.

Annotated bibliographies on subjects of general engineering interest are prepared and announced in *Publishers' Weekly,* library periodicals, and scientific and technical journals. Some bibliographies already issued relate to filing, classification, and indexing systems for engineering offices and libraries; shell molding; adhesive bonding of metals; and machinery foundations.

Through an arrangement between the Engineering Societies Library and the publishers of the *Engineering Index,* all publications received by the Library are made available to *Engineering Index* for indexing and all items indexed in *Engineering Index* are permanently retained by the Library.

ENTOMOLOGICAL SOCIETY OF AMERICA

4603 Calvert Road
College Park, Md. 20740
Telephone: 864-1334 (Area code: 202)

The Society answers technical questions on taxonomy, biology, morphology, and physiology of insects; economic entomology; chemical, biological, and other control practices; toxicology; abnormal physiology; and applied entomology. Requests for consulting service are referred to members.

Publications include the *Annals of the Entomological Society of America* and the *Journal of Economic Entomology,* both bimonthly; *Miscellaneous Publications of the Entomological Society of America,* issued at irregular intervals; and the quarterly *Bulletin of the Entomological Society of America.* All are available on subscription. The annual *Index to the Literature of American Economic Entomology* was discontinued in 1959; however, back issues covering the period 1915–1959 may be bought individually.

ETHYL CORP.

Chemical Research and Development Library

Post Office Box 341
Baton Rouge, La. 70821
Telephone: 357-4361 (Area code: 504)

The library has a specialized literature collection on chemical engineering and organic, inorganic, and physical chemistry. It indexes reports, searches journals, abstracts books and journals, and translates into English its Italian, French, and German holdings.

Ordinarily, the Library serves only Corporation employees, but residents of the area are occasionally permitted to use nonconfidential materials on the premises or by loan and may obtain copies of noncopyrighted materials in the collection.

Ethyl Corp. Research Laboratories

1600 West Eight Mile Road
Ferndale, Mich. 48203
Telephone: 542-6940 (Area code: 313)

The Technical Information Services of the Laboratories acquires, processes, and disseminates information on chemical research, with emphasis on the development of products for use by the petroleum industry, but not limited exclusively to that industry. Its holdings include books, journals, reports, patents, films and photos, maps and charts, data, nonprinted material, and proprietary information. Foreign sources are represented by literature in Russian, Italian, Spanish, French, and German.

Use of the library collection is generally limited to Corporation personnel.

Petroleum Refining Developments, a monthly digest, is free to executives in customer companies. *Ethyl Technical Notes,* generally issued quarterly, is free to customer companies, fleet operators, and automotive companies. The *Ethyl Technical Newsletter,* a monthly publication, is free to customer companies and to a limited number of other interested persons.

EXPANDED SHALE, CLAY, AND SLATE INSTITUTE

National Press Building
14th and F Streets NW.
Washington, D.C. 20004
Telephone: 783–1669 (Area code: 202)

The Institute, a technical organization supported by the producers of expanded shale, clay or slate by the rotary kiln process, has a dual mission: To improve and extend the uses of expanded shale, clay, or slate aggregate; and to disseminate information to the architectural and engineering professions and to the construction industry.

Through research, field studies, and performance records, data are collected and evaluated on the uses of rotary kiln lightweight shale, clay or slate aggregate; structural lightweight concrete; and concrete masonry. The interests of the Institute cover both the physical properties of concrete materials and design data as applied to structures. Specifications and standards are recommended for the concrete industry.

Requests for technical information are answered without charge. In addition to technical reports and journal articles, the Institute issues *Concrete Facts,* a quarterly news journal, and *Lightweight Concrete Information Sheets,* technical bulletins published irregularly and presenting specifications and information on the properties and applications of lightweight concrete. Two manuals are also available: *Concrete Masonry Manual,* a compilation of data on expanded shale masonry construction; and *Bridge Deck Survey,* a tabulation of statistics on 150 bridges in the United States and Canada. Single copies of all publications are free; there is a charge for larger orders.

FARMER COOPERATIVE SERVICE, *See* U.S. DEPARTMENT OF AGRICULTURE

FEDERAL AVIATION AGENCY

Aeronautical Center Library Service

Federal Aviation Agency
Will Rogers Field
P.O. Box 1082
Oklahoma City, Okla. 73101
Telephone: 681–2311 Extension 710 (Area Code: 710)

The Aeronautical Center Library Service is made up of three components: The Center Library; the Civil Aeromedical Research Institute Medical Library; and the Film Library.

The Center Library consists of books, journals, reports, films and photos, maps and charts, and data in the subject areas of aeronautics, avionics, electronics, engineering, management, computers, and air traffic control. A document and reference service is available to all Aeronautical Center personnel, students, and others, including groups professionally interested in aviation. Holdings may also be borrowed on interlibrary loan. The Library prepares bibliographies and issues acquisition lists.

The Civil Aeromedical Research Institute Medical Library maintains a collection of books, journals, reports, and films and photos on all aspects of aviation medicine. Subject coverage includes the application of human factors to medical aspects of civil aviation safety, physiological responses of man to his environment, nervous system and associated studies related to aviation medicine, psychophysiology, survival and safety equipment, and life processes. Material is available to personnel of the Institute and to others with special permission. Interlibrary loan services are provided.

The Film Library consists largely of a collection of training films prepared by the FAA, the U.S. Air Force and Navy and other Government agencies. Specific areas of interest include aerodynamics, aeronautics, aerial navigation, air traffic control, electronics, radiology, and weather. Material is available for loan only. Some films are restricted to FAA use; others are distributed for public use but must be requested several weeks in advance of showing. Films available to the public are listed in the *FAA Film Library Catalog,* published annually.

Alaskan Region Library

Federal Aviation Agency
632 Sixth Avenue
Anchorage, Alaska 99501
Telephone: 277–1401 and 275–5401 (Area code: 907)

A regional information resource, the Library has holdings of books, journals, reports, films and photos, and maps and charts on both general and specialized aspects of aviation, such as material on Alaskan weather. Reference services are provided to Government agencies and their contractors.

Headquarters Library

Federal Aviation Agency
Room 930
800 Independence Avenue SW.
Washington, D.C. 20553
Telephone: 962–5247 (Area code: 202)

The collections of the Headquarters Library include standard reference works on aviation; aviation journals; technical reports prepared by FAA, NASA, the U.S. Air Force, International Civil Aviation Organization, and others; films and photos; and FAA and U.S. Air Force manuals, specifications, standards, and technical orders. There is subject coverage in aerodynamics, astronautics, aircraft and aircraft equipment, engines, fuels, air traffic control, airlines, airports, communication systems and equipment, aviation medicine, meteorology, acoustics, safety, and human engineering.

An information center, the Library answers, by phone or by mail, both technical and general reference questions; provides research service to FAA personnel; handles inquiries relative to certification of pilots, instructors, engineers, mechanics and inspectors; makes its collections directly available to the public for on-site use; and provides an interlibrary loan service for all material except that restricted to FAA or other Federal agency use.

Medical Reference Library

Federal Aviation Agency
Room 930
800 Independence Avenue SW.
Washington, D.C. 20553
Telephone: 962–5247 (Area code: 202)

Maintained for the use of the Aviation Medical Service Staff, the Library has a collection of books, journals, and reports related to aeronautical medicine and aviation safety. A large percentage of the reports originate from the U.S. Air Force; there is also a complete set of the former Civil Aeronautics Administration's reports on human factors in flying. Although the Library is not open to the general public, reference services are provided to research workers in the field of aeromedicine.

National Aviation Facilities Experimental Center

Federal Aviation Agency
Atlantic City Airport
Atlantic City, N.J. 08405
Telephone: 641–8200 Ext. 2331 (Area code: 609)

Formerly the Technical Development Center at Indianapolis, Ind., the NAFEC has a library with a book, journal, and report collection on various aspects of aviation, specializing in air traffic control, air navigation, aerodynamics, air communications, data processing procedures and equipment, and systems engineering. Reference and document services are provided. Material is generally made available to anyone through an interlibrary loan service; some documents are restricted to FAA or other Federal agency use. The library issues an announcement journal.

FIBER SOCIETY, INC.

Post Office Box 625
Princeton, N.J.
Telephone: 924–3150 (Area code: 609)

The Society conducts semiannual technical meetings for the presentation of original and review papers in the field of fiber science, including polymer physics and chemistry, textile engineering and technology, and fiber morphology. These discussions are open to the public. Informal referral service is provided.

FINE ORGANICS, INC.

205 Main Street
Lodi, N.J. 07644
Telephone: 472–6800 (Area code: 201)

A chemical manufacturer, Fine Organics develops and manufactures new products for various industries. Research and manufacture cover reagent chemicals, pharmaceutical raw materials, quaternary ammonium compounds, cosmetic raw materials, plastic additives, organic intermediates, phenolic germicides, pollution control chemicals, and industrial maintenance products. Answers to technical questions are provided. However, if the information requested is beyond the scope of normal operation, a specific research contract may be entered into, for which laboratory facilities are available.

FISH AND WILDLIFE SERVICE, *See* U.S. DEPARTMENT OF THE INTERIOR

FISHER SCIENTIFIC CO.

711 Forbes Avenue
Pittsburgh, Pa. 15219
Telephone: 391–1330 (Area code: 412)

A commercial firm, the Company develops and manufactures laboratory instruments, apparatus, and chemical reagents. It maintains demonstration laboratories and supplies technical information on chemicals and instrumentation to scientists and educators. The Fisher Collection of Alchemical and Historical Pictures, a pictorial museum on the evolution of chemistry, pharmacology, and medicine from Chinese alchemy to the atomic age, is on permanent display in the Pittsburgh headquarters and accessible to the public.

The Laboratory, published quarterly, and *The Clinical Laboratory* are disseminated through controlled free distribution.

FITZ PATRICK CO.

50 Fort Hill Circle
Staten Island, N.Y. 10301
Telephone: 447–7287, 448–9000 (Area code: 212)

The Company provides reference and consulting services on the subject of ornithopters, natural flight, large amplitude unsteady aerodynamics, and related biology. It maintains a small library and publishes technical reports, state-of-the-art reviews, and bibliographies. Source material includes Russian, Italian, Spanish, French, and German.

FLOWER AND COOK OBSERVATORY, *See* UNIVERSITY OF PENNSYLVANIA

FLUIDYNE ENGINEERING CORP.

5900 Olson Memorial Highway
Minneapolis, Minn. 55416
Telephone: 544–2721 (Area code: 612)

A manufacturer of wind tunnels and related installations, the Corporation provides referral and consulting services on wind-tunnel data; experimental tests, facilities design, fabrication, and installation; aerodynamic and propulsion research; heat transfer; shock tunnels; rocket altitude test stands; materials test equipment; precision measuring instruments; optical systems; computers, servosystems; and actuators.

Consultations about technical problems are usually handled on a contract basis. For answers to brief technical questions, inquirers are referred to appropriate sources of information; there is no charge. Requests should be directed to the vice president.

FOLLOW-UP AGENCY, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

FOOD AND NUTRITION BOARD, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

FOOTE MINERAL CO.

Research and Development Library

Route 100
Exton, Pa. 19341
Telephone: 363–6500 (Area code: 215)

The Library has a specialized collection on lithium, including alloys, inorganic chemicals, minerals, soaps, and lithium in glass. Some of the material is from foreign sources.

Reference and consulting services are made available outside the Company by special permission. Interlibrary loans are made.

FORD FORESTRY CENTER, *See* MICHIGAN TECHNOLOGICAL UNIVERSITY

FORD MOTOR CO.

Technical Information Section

Post Office Box 2053
20000 Rotunda Drive
Dearborn, Mich. 48124
Telephone: 563–3000 (Area code: 313)

In support of the Company's engineering and research staff, the Section maintains a library on automotive, mechanical, human, electrical, and electronic engineering; chemistry; metallurgy; physics; and mathematics. Holdings consist of books, journals, and reports in English, Russian, French, and German. Arrangements for use of available resources as reference material may be made by persons not affiliated with the Company.

FOREST PARK FOUNDATION

600 Commercial Bank Building
Peoria, Ill. 61602
Telephone: 673–8122 (Area code: 309)

A nonprofit organization devoted to studies on aging, the Foundation also sponsors the Institute of Physical Medicine and Rehabilitation, which serves handicapped persons of all age groups. Other interests include geriatric rehabilitation, medical care and housing for the aged, practical nurse training programs, home care programs, and the use of park land and wilderness areas. The Foundation supports demonstration projects in these fields.

A consulting service is available without charge. The *Classified Bibliography on Gerontology and Geriatrics,* published by the Foundation, may be purchased from the Stanford University Press. A book, *Housing for the Elderly—European Approach,* is available for purchase from the Foundation.

FOREST PRODUCTS RESEARCH SOCIETY

417 North Walnut Street
Madison, Wis. 53705
Telephone: 238–6771 (Area code: 608)

The Society disseminates information on fundamental and applied research in the wood products industry, including anatomy and fundamental properties of wood, timber production, mechanical and chemical conversion, particle and fiber processes, glue and gluing processes, treatments and coatings, drying, engineering, production management, and marketing.

In responding to inquiries, the Society relies mainly on material published in its monthly *Forest Products Journal.* Reprints of articles in the *Journal* are available for purchase.

FOSTER D. SNELL, INC.

29 West 15th Street
New York, N.Y. 10011
Telephone: 924–8800 (Area code: 212)

This commercial organization provides consulting services in chemical product and process development, chemical plant design, product labeling, sensory panel testing, radiochemistry, marketing and economic surveys, toxicology, detergents, insecticides, fertilizers, foods, flavors, odors, cosmetics, drugs, pharmaceuticals, lacquers, paints, varnishes, plastics, coatings, rubber, textiles, waxes, and lubricants. Fees are on a quotation basis.

All activities of the Calkin and Bayley Division of the Company at the New York address relate to the production of *Chemical Market Abstracts,* available by subscription. *CMA* contains data applicable for chemical market research, including chemicals and chemical companies, chemical exports and imports, new plants and products, trade names, statistics, production and consumption, chemical consumers, new uses of chemicals, Government regulations, prices, processes, patents, foreign developments, and raw materials. The abstracts are prepared from literature in English, French, German, and Japanese.

A copy of all *CMA* citations appearing for a specific substance during a given year will be furnished for a fee. The total retrospective search capability extends to 1950. Specific questions related to chemical marketing are answered with the cost of service dependent on the time required to secure the information needed. Annual indexes to *Chemical Market Abstracts* are not included in subscription, but are sold separately.

Material taken directly from *CMA* is issued monthly under separate cover to provide publications covering special areas at reduced cost. They are *Petro-Market, Polymer Market Abstracts, Fatty Abstracts,* and *International Chemical Development.*

FRANKLIN INSTITUTE

Benjamin Franklin Parkway at 20th Street
Philadelphia, Pa. 19103
Telephone: 564–3600 (Area code: 215)

Computing Center

By means of an electronic computer service maintained for clients in business, industry, and Government, the Computing Center provides business data processing; scientific applications; and training courses, including computers for laymen, systems analysis and programing, and computers and business.

The services of the Computer Center staff are available on an hourly or fixed-fee basis; projects may be scheduled on a one-time or repeat basis. Counseling from programers, analysts, and statisticians is available.

Laboratories for Research and Development

The Franklin Institute Laboratories consist of five divisions, each including several laboratories, plus two independent laboratories. The divisions are: Chemistry, Solid State Sciences, Operations Research, Mechanical and Nuclear Engineering, and Electrical Engineering. The independent laboratories are Applied Physics and Aerospace.

Projects encompassing basic research, applied research, and development are conducted for Government agencies, private industry, and trade associations. Work is performed on a contract basis, usually under a cost-plus-fixed-fee arrangement. Fields of interest include: Metal deformation, fatigue, and stress analysis; alloys; gas bearings; electroexplosive devices; bioinstrumentation; space simulation equipment; radiation effects and containers for radioactive materials; heat transfer; gas-cooled reactor components; thermal and hydraulic nuclear systems; magnetic films; the organic solid state; radar terrain return; space navigation; propellant composition; adhesives, plastics, and coatings; air and water pollution; operations analysis; industrial engineering; engineering psychology; mapping and geodetic techniques; and computer techniques.

A bibliography, with abstracts, on *Gas-Lubricated Bearings—Revised* is available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234. The *Laboratory Report,* a quarterly report on current research programs, is available free on request. *The Army, Navy, Air Force Fuze Catalog* is a complete store of technical and military data on all fuses and fuse explosive components used by the military. The catalog in book form is available from the Defense Documentation Center, Cameron Station, Alexandria, Va., 22314. *The Journal of the Franklin Institute* is issued monthly and available on subscription. This publication contains articles of general interest, as well as on experimental, practical, and theoretical work in all phases of the physical sciences.

Library

The holdings of the Library consist of books; trade catalogs; periodicals; United States, British, and Swiss patents; microfilm; and technical reports in most areas of engineering, mathematics, physics, geophysics, space sciences, and chemistry. Special collections include the Ware Reference Collection on Sugar; the Wright Brothers Aeronautical Engineering Collection; horological books and pamphlets since 1826; the Franklin Institute Archives; and the Lenthall collection on naval vessels. There is material in English, Russian, Italian, Spanish, French, and German.

The Library is a free reference library open to the public. Only members of the Franklin Institute and staff are permitted to borrow book material.

Organized as a search-translation-abstracting service in the fields of engineering, physics, and chemistry, the Library's Science Information Service provides technical consultations; translations from Slavic, Romance, Germanic, and Far Eastern languages; a reference service covering retrospective literature searching, design of indexing systems, indexing, abstracting, current literature scanning, and patent and trademark searches; and document photoduplication. Sources of information are the collections of the Franklin Institute Library and consultation with scientists and engineers at the Franklin Institute Laboratories. The information center is available to anyone; there are fees for each service.

Monthly and semimonthly bibliographies on specific subjects are issued by the Service.

Science Museum and Planetarium

The Science Museum of the Franklin Institute maintains exhibits on such subjects as aviation; space exploration; maritime science; railroading; transportation; bridges; oil; steel; chemistry; time; radio and other communications; engineering; physics of motion, heat, and electricity; machines; vectors and measurements; photography; meteorology; electromagnetic spectrum; and the human heart. It includes an observatory. Since the Science Museum is not intended to be a collection of historical exhibits, it displays and demonstrates the basic principles of the physical sciences and technologies, with examples of their applications, in terms as modern as applicable. The exhibits are intended to be educational in nature, and are slanted particularly toward young people of the junior high school and high school ages.

The Science Museum answers technical questions concerning its exhibits. It also conducts an educational program of lectures, workshops, and student and teacher seminars.

Associated with the Museum is the Fels Planetarium, which can project the night skies as seen at any specific time and place and which also provides special demonstrations on space exploration. Both the Museum and the Planetarium are open to the general public. There is a charge for admission.

Weather Center

The Institute's newest activity is its weather service. It maintains a modern weather station, equipped and staffed to supply customers with complete weather information to suit their particular needs. Minute-by-minute analysis of changing weather conditions is possible, using the Center's meteorological facilities. Details about individualized plans may be obtained from the Director of the Weather Service.

FRIDAY HARBOR LABORATORIES, *See* UNIVERSITY OF WASHINGTON

FUEL CELL INFORMATION INDEX, *See* BATTELLE MEMORIAL INSTITUTE

GALLAUDET COLLEGE

Edward Miner Gallaudet Memorial Library

Florida Avenue and 7th Street, NE.
Washington, D.C. 20002
Telephone: 543-9515 Extension 271 (Area 202)

The Library has an extensive special collection of materials relating to various aspects of deafness and associated subjects covering the period from 1546 to date. Those titles in the collection published since 1900 have been classified and cataloged; the collections of earlier materials have been checklisted. Numerous complete files of bound journals relating to deafness are on file. Other holdings consist of pamphlets, leaflets, brochures, reprints of journal articles, and other nonbook forms of publications, as well as theses and dissertations, which are being acquired from both American and foreign academic institutions. Topics covered include audiology, deaf-blind education, guidance, hearing, heredity, language, psychology, personality, reading, rehabilitation, schools, speech and speech reading, tests, and vocational education.

In cooperation with the American Speech and Hearing Association, Gallaudet College publishes *DSH Abstracts,* a quarterly journal covering world literature on deafness, speech, and hearing. It is available by subscription.

Linguistics Research Laboratory

Florida Avenue and Seventh Street, NE.
Washington, D.C. 20002
Telephone: 543-9515 Extension 245 (Area code: 202)

The Laboratory conducts research on the American, European, and International sign languages of the deaf, including their structure, lexicon, and grammar. It also carries out studies on linguistic descriptions of English and on the application of linguistics to the language learning of persons without functional hearing. Findings are made available by publication and are incorporated into the literature collection maintained by the Laboratory. On-site reference use of data and personal consultation are available without charge to qualified linguists.

GENERAL ANILINE & FILM CORP.

Central Research Laboratory

General Aniline & Film Corp.
Coal and Lincoln Streets
Easton, Pa. 18042
Telephone: 258-6101 (Area code: 215)

The Laboratory has a library which processes books, journals, patents, films and photos and a central technical file which acquires and indexes reports, data, and nonprinted material. Subject coverage is the synthesis and use of organic compounds and inorganic compounds, including catalysts and iron carbonyls. Publications in Russian, Italian, Spanish, French, and German are included. Information services are primarily for Corporation personnel. On-site reference use by others may be requested.

Rensselaer Library and Technical Information Service

General Aniline & Film Corp.
Riverside Avenue
Rensselaer, N.Y. 12144
Telephone: 465-4511 (Area code: 518)

Holdings include books, journals, reports, patents, films and photos, and nonprinted material pertaining to the composition, synthesis, and uses of organic compounds and dyestuffs. English, Russian, Italian, Spanish, French, and German language sources are represented.

Although access to the material is generally restricted to Corporation personnel, on-site use may be extended to others by special arrangement.

Research and Development Laboratory

General Aniline & Film Corp.
P.O. Box 12
Linden, N.J. 07036
Telephone: 486-2600 (Area code: 212)

The Laboratory has a literature collection on organic compounds, their synthesis and use and on inorganic compounds and catalysts. Material consists of books, journals, patents, and films and photos. Foreign sources are in Russian, Spanish, Italian, French, and German.

Reference, translating, and document services are limited to Corporation personnel. However, books are loaned to other libraries in the vicinity.

Research Library

General Aniline & Film Corp.
Vestal Parkway East
Binghamton, N.Y. 13905
Telephone: 729–6555 Extension 3138 (Area code: 607)

The Library acquires books, journals, and reports in English, Russian, Italian, Spanish, French, and German pertaining to chemistry, physics, and photography. Services to nonemployees are limited to interlibrary loan.

GENERAL FOODS CORP.

Technical Center Library

Mail:
White Plains, N.Y.

Location:
555 South Broadway
Tarrytown, N.Y. 10591
Telephone: 631–6400 (Area code: 914)

The Library serves as a source for information on food research and manufacturing. It maintains a collection of books, journals, reports, patents, and data in the areas of food science and technology, including some coverage in biology, chemistry, and packaging. Literature is collected in English, Russian, Italian, Spanish, French, and German.

Reference and document services are limited to employees of the Corporation. Bibliographies, abstracts of current literature, and reports on developments in the food industry prepared by the Library are also restricted to General Foods personnel. Interlibrary loan service, however, is available.

GENERAL MILLS, INC.

Central Research Libraries

9000 Plymouth Avenue, North
Minneapolis, Minn. 55427
Telephone: 540–2801 (Area code: 612)

The Libraries are primarily for in-house use. Holdings consist of books, journals, reports, patents, data, and correspondence relating to food, flour milling, bakery products, cereals and breakfast foods, food chemistry and engineering, pet foods, polymers, paints, and synthetic resin adhesives. The Clyde H. Bailey reprints collection consists of special material on cereals and milling up to 1950. Foreign literature in Russian, Italian, Spanish, French, and German is included. A classified index has been prepared for material acquired between 1944 and June 1962.

On-site reference is permitted by appointment, and interlibrary loans are available.

GENERAL SERVICES ADMINISTRATION

National Archives and Records Service

Pennsylvania Avenue and 8th Street, NW.
Washington, D.C. 20408
Telephone: 963–4626 (Area code: 202)

The Office of Records Management of the U.S. National Archives provides information and advice on the management, organization, filing, storage, and retrieval of office records, forms, documents, correspondence, reports, and data; the preservation of paper; office machines and equipment; microfilm and other records systems; and source data automation. Services are primarily for Federal agencies. However, printed material is furnished or brief answers given to inquiries from industry and the public within the limits of time available.

A list of publications is available free on request.

GEOLOGICAL SURVEY, *See* U.S. DEPARTMENT OF THE INTERIOR

GEOPHYSICS RESEARCH BOARD, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

GEORGE S. COX MEDICAL RESEARCH INSTITUTE, *See* UNIVERSITY OF PENNSYLVANIA

GEORGE WASHINGTON UNIVERSITY

Biological Serial Record Center

2000 P Street NW.
Washington, D.C. 20036
Telephone: 462–5830 (Area code: 202)

Sponsored by the National Institutes of Health, the Center collects information on serials in the life sciences to set up a depository for bibliographic information. Its objective is to supply the title, abbreviation, address, editor, editorial policy, nature of contents, price, format, language, frequency, type, coverage by abstracting services, and number of volumes issued for an estimated 50,000 serial publications. English, Chinese, Russian, Japanese, Italian, Spanish, French, German, and Scandinavian sources are included. A list of aquatic science serials is now available. Reference and consulting services may be provided upon application.

Logistics Research Project

707 22d Street NW.
Washington, D.C. 20007
Telephone: 338–4540 (Area code: 202)

The purpose of the Project is to study logistics problems in all their aspects in order to develop computer techniques for their solution. Subjects covered include military logistics, data processing and mathematics, economics, operations research, and management science.

Reference and consulting services are provided with the approval of the sponsoring Department of Defense agency.

Patent, Trademark, and Copyright Foundation

708 22d Street NW.
Washington, D.C. 20007
Telephone: 338–0250 (Area code: 202)

The Foundation serves as an information center on intellectual property and related antitrust and trade practice laws and policies, trademarks, patents, and copyrights. Questions are answered without charge; consultations are provided for a fee.

The Foundation publishes the quarterly *Patent, Trademark and Copyright Journal of Research and Education,* which contains the Foundation's research reports.

GEORGIA INSTITUTE OF TECHNOLOGY

Price Gilbert Memorial Library

225 North Avenue NW.
Atlanta, Ga. 30332
Telephone: 873–4211 (Area code: 404) TWX: 404–527–2308

The Library has collections of scientific and technical publications essential to the support of advanced study in scientific and engineering fields, including psychology, bioengineering, and industrial management. Aeronautics, architecture, ceramics, textiles, and patents are subjects of special collections. Material is acquired in English, Chinese, Russian, German, Japanese, Italian, Spanish, and French.

The patent collection consists of a complete file of all U.S. patents and accompanying drawings issued since May 7, 1946; a complete set of the *Official Gazette,* which gives patent information, dating back to 1872; and other reference literature on patents. Abstracts of patents from the Soviet Union, Great Britain, Canada, Australia, Germany, and other countries are acquired.

As a Federal Regional Technical Report Center, the Library serves as a depository for reports issued by the U.S. Atomic Energy Commission, the Department of Defense, the National Aeronautics and Space Administration, and other Government agencies and their contractors.

The collections are open to the public for reference use. Loans and various bibliographic services are available to academic, industrial, governmental, alumni, and other off-campus groups by individual arrangement or by interlibrary loan. Photocopies of material may be purchased.

Rich Electronic Computer Center

Engineering Experiment Station
Georgia Institute of Technology
225 North Avenue NW.
Atlanta, Ga. 30332
Telephone: 873–4211 (Area code: 404)

The Computer Center provides analysis, research, programing, and digital computing services in the fields of operations research, numerical analysis, the physical sciences, engineering, management, statistics, economics, information processing, systems design, and storage and retrieval.

An extensive library of ready-to-use programs, routines, and subroutines is maintained by the Center in the areas of operations research techniques, scientific management, statistics, and numerical analysis. Most services for those outside the organization are provided on a cost reimbursement basis.

Technical Information Section

Engineering Experiment Station
Georgia Institute of Technology
225 North Avenue NW.
Atlanta, Ga. 30332
Telephone 873–4211 (Area code: 404)

The Georgia Tech Engineering Experiment Station is the agency of the University System of Georgia designed to coordinate and conduct investigations in all fields of engineering and in many aspects of the physical, chemical, and biological sciences. Some of these research activities concern the development of Georgia's industrial economy, the industrial uses of radioisotopes, new processes and uses of Georgia's ceramic clays and other minerals, nuclear physics and nuclear reactor engineering, applications of nuclear physics and chemistry to the health sciences, organic chemistry, semiconductors, microbiology, factors affecting the aerial transmission of diseases, applications and development of electronic computers, mathematical statistics, new methods of electrical power system analysis, the effects of river impoundments on water quality, meat-separation processes for the chicken industry, and protective treatments for cotton textiles.

The Technical Information Section was founded to provide information services in science and engineering. Technically trained personnel perform literature surveys and related services, provide consultations, and make translations. A photocopying service is provided. These services are available to the public on a cost reimbursement basis. The Section prepares and publishes two reviews which are available on subscription: the *Monthly Literature Review,* which provides an awareness survey; and the bimonthly *Special Monthly Literature Review—Analog Computer,* which reports titles of articles on analog computers, components, applications, and techniques.

GEO-SCIENCE, INC.

Post Office Box 1128
South Road
Alamogordo, N. Mex. 88310
Telephone: 437–5430 (Area code: 505)

A commercial enterprise, Geo-Science, Inc. conducts research and provides consulting services for a fee on upper atmosphere phenomena, specifically photometric measurements of intensities of the night airglow; certain aspects of missile range optics; and general topics in geophysics. Data are acquired and issued in English and Spanish. Scientific data obtained under contracts with Government agencies become the property of the Government and may be used only with the permission of the contracting agency.

GEOSURVEYS

University of Pennsylvania
101 Fine Arts Building
Philadelphia, Pa. 19104
Telephone: 382–2214 (Area code: 215)

As an information center for the mineral industry, Geosurveys has a collection of books, journals, reports, maps and charts, data, and records of interviews and personal investigations dealing with applied mineralogy, including exploration and development; production, consumption, and reserves; energy resources; water supply; mineral economics and transportation; and mineral developments in the United States and abroad. There is a specialized collection of geologic and economic reports from all countries in Latin America. Languages represented are English, Spanish, Portugese, and Italian. In addition to its activities as a collection agency, Geosurveys conducts limited field research.

Consultant services are available for a fee. Reference material is available for on-site use, and reproduction services may be obtained at cost. *GeoSurveys,* a weekly 2-page news release and commentary, is available on subscription.

GERMANIUM INFORMATION CENTER, *See* MIDWEST RESEARCH INSTITUTE

GLASS TEMPERING ASSOCIATION

2217 Tribune Tower
435 North Michigan Avenue
Chicago, Ill. 60611
Telephone: 644–0828 (Area code: 312)

A trade organization of firms engaged in tempering glass, the Association provides information on tempered glass products and their uses. General questions from the public are answered without charge. Publications include technical reports, standards and specifications, and data handbooks.

GRAND FORKS LIGNITE RESEARCH LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

GRAPHIC ARTS INFORMATION SERVICE, *See* ROCHESTER INSTITUTE OF TECHNOLOGY

GRAY HERBARIUM, *See* HARVARD UNIVERSITY

GULF COAST RESEARCH LABORATORY

East Beach
Ocean Springs, Miss. 39564
Telephone: 875–4233 (Area code: 601)

The Gulf Coast Research Laboratory, a part of the higher educational system of the State of Mississippi, is also a consultant to the seafoods division of the Alabama Department of Conservatories on fishery laws and administration and to the Freeport Sulphur Co. on water pollution. It conducts research on hydrography in the Mississippi area and on shrimp, oyster, and fishery resources.

The Laboratory has a library collection on general science, limnology, oceanography, marine biology, ecology, general zoology, anatomy, physiology, ornithology, invertebrate zoology, geology, paleontology, fishes, fisheries, physics, and chemistry. Books, journals, reports, and foreign periodicals in Russian, Italian, Spanish, French, and German are received regularly. The Laboratory also maintains a museum containing specimens of marine fauna of the Gulf of Mexico, herpetofauna of the southeastern United States, and marine birds.

Technical questions from persons with a professional interest are answered by letter or through consultation without charge. Both the museum and the literature collection are accessible for on-site use, and research reprints are provided free on request. *Gulf Research Reports,* containing research findings of Laboratory staff members, is published at irregular intervals. A bibliography of general works on the sea, fishes, shellfish, and marine invertebrates is available for beginners in the field.

HARDWOOD PLYWOOD MANUFACTURERS ASSOCIATION

2310 South Walter Reed Drive
Arlington, Va. 22206
Telephone: 671–6262 (Area code: 703)

An association of hardwood manufacturers concerned with the manufacture, testing, inspecting, selling, and use of hardwood plywood, the Institute maintains an information center and literature collection in association with its research and testing laboratory. Although members and Government agencies are given preference with regard to information resources, services are also provided to nonmembers. There are no fees except for use of laboratory facilities.

The *Hardwood Plywood Manual* may be purchased. Other Institute publications are available free in single copies or at cost to nonmembers.

HARRIS RESEARCH LABORATORIES, INC.

6220 Kansas Avenue NE.
Washington, D.C. 20011
Telephone 882–4043 (Area code: 202)

Harris Research Laboratories engage in research and development in textiles and allied chemical fields, such as the fiber, cosmetic, leather, petroleum, and rubber industries. Specialization includes all aspects of fiber, yarn, and fabric properties; polymer chemistry with regard to properties and treatments of fibers, films, and plastics; surface chemistry with regard to surfactant synthesis, detergency, lubrication, and chemical finishes; protection and decontamination of clothing and equipment; and clothing protection from extremes of heat and cold.

Services are available on a contract basis only. A literature collection for company use is composed of reports, patents, data, and nonprinted material, containing English, Russian, and German language sources.

HARVARD UNIVERSITY

Arnold Arboretum and Gray Herbarium

Harvard University
22 Divinity Avenue
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2366 (Area code: 617)

The Arnold Arboretum Library collects material in all branches of botany with particular emphasis on woody plants. There is a special literature collection on the flora of Asia and a collection of historical materials consisting of incunabula, color-plate books, and rare editions. Information on herbaceous plants is acquired by the Gray Herbarium Library, which has historical material on taxonomic botany. Holdings at both libraries consist of books and journals in all major languages.

The libraries are open to the public for on-site reference use. Some books are available on interlibrary loan. Microfilm and photocopying services are provided.

Periodical publications available on subscription include the *Journal of the Arnold Arboretum,* published quarterly, and *Arnoldia,* a bulletin of general information concerning projects of the Arboretum issued 12 times a year. Books, bibliographies, and monographic studies of the Arboretum and Herbarium are available for sale. Reprints of journal articles written by members of the Gray Herbarium are available for a small fee. Price lists are provided on request.

Biology Laboratories

Harvard University
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2332 (Area code: 617)

The Biology Laboratories have a working collection of books and journals on plant and animal physiology, genetics, biochemistry, biophysics, cytology, histology, ecology, embryology, endocrinology, and microscopic technique. Foreign literature includes material in Russian, Italian, Spanish, French, and German. Books and journals at least 5 years old may circulate on interlibrary loan.

Chemistry Library

Harvard University
Converse Memorial Laboratory
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 679 (Area code: 617)

A working collection for the Department of Chemistry, the Library has books, journals, and pamphlets in chemistry and biochemistry, but not applied chemistry. There is a special collection of foreign dissertations. Literature is collected in English, Russian, Japanese, Italian, French, and German.

Restricted access is provided to accredited borrowers not affiliated with Harvard. Interlibrary loans are limited to Harvard theses.

Farlow Reference Library

Harvard University
20 Divinity Avenue
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2369 (Area code: 617)

The Farlow Library has an extensive collection on algae, mosses, liverworts, lichens, fungi, and diseases caused by fungi. Holdings consist of books, journals, and reports in all major languages. Films are also acquired. Material is only available for on-site reference use. There is no interlibrary loan service. Photocopying services are provided.

Geological Science Library

Harvard University
Geological Museum
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2357 (Area code: 617)

Servicing the Department of Mineralogy and Petrography, the Geological Science Library has a collection of books, journals, and reports in the areas of structural and economic geology, seismology, geophysics, geomorphology, mineralogy, crystallography, and petrography. Foreign literature is in Russian, German, and French. All materials are available for on-site reference use. Books may be obtained on interlibrary loan. Reprints of papers and journal articles written by members of the Department are distributed free upon request.

George David Birkhoff Mathematical Library

Harvard University
2 Divinity Avenue
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2170 (Area code: 617)

A reference source for the Department of Mathematics, the Library has a working collection of books and journals in arithmetic, geometry, trigonometry, calculus, differential equations, mechanics, hydromechanics, Fourier's series, probability, and statistics. Material is collected in all major languages. Reference and document services are provided. The general public may consult holdings on site. There are no interlibrary loans.

Gordon McKay Library of Engineering and Applied Physics

Harvard University
Pierce Hall
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2836 (Area code: 617)

Holdings consist of books, journals, and reports on applied mathematics; electrical and electronic engineering; nuclear engineering; mechanical engineering, specifically structural mechanics, elasticity, stresses, and shock waves; aero-, hydro-, and thermodynamics; heat transfer; soil mechanics; sanitary and public health engineering; metallurgy; science of materials; meteorology; and physical oceanography. There is a complete file of technical reports on research conducted at the University in these fields. There are special collections of aeronautical and astronautical reports, and the Library serves as a depository for unclassified U.S. Atomic Energy Commission reports. Material is collected in English, German, French, and Russian.

Holdings are available to the public for on-site reference and may be borrowed on interlibrary loan. Journals are loaned only to educational institutions. A photocopying service is available through the Widener Library.

Reprints of journal articles prepared by members of the Division of Engineering and Applied Physics are free upon request. Reprints on soil mechanics are sold at nominal charge. The Library prepares announcement lists of available publications.

Library of Economic Botany

Harvard University
Botanical Museum
Cambridge, Mass. 02138
Telephone: 868–7600. Extension 2358 (Area code: 617)

This working collection for the Botanical Museum covers economic botany with emphasis on historical materials. Books, journals, and reports are collected in all major languages. Films and maps are also acquired. The Library is open to the general public for on-site reference and books are available on interlibrary loan. Photocopying services are provided.

Museum of Comparative Zoology

Harvard University
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2475 (Area code: 617)

The Museum of Comparative Zoology has a library of books, journals, and reports in the fields of zoology, paleontology, stratigraphy, sedimentation, and oceanography. There are special holdings of reports of scientific expeditions. Languages represented include English, Russian, Italian, Spanish, French, German, Chinese, Japanese, and the Scandinavian languages. Reference and duplicating services are available. Books and journals may be consulted in the library. Interlibrary loan privileges are available for books less than 100 years old; journals do not circulate.

Publications available for sale include: *Memoirs* of the M.C.Z. (1864–1938); *Breviora* of the M.C.Z. (1952–); *Annual Report* of the M.C.Z. (1859–); *Peter's Check-list of Birds of the World,* a 15-volume series, of which 10 volumes have been published (1931–); *Johnsonia,* monographs of the marine mollusks of the western Atlantic (1941–); *Occasional Papers on Mollusks* (1945–); *Nuttall Ornithological Club Bulletin* (1876–1883), *Memoirs* (1886–1951), and *Publications* (1957–); *Psyche,* a journal of entomology (1874–); and *Proceedings of the New England Zoological Club* (1899–1947). Also distributed by the Museum is the remaining stock of the *Proceedings, Occasional Papers,* and *Memoirs* of the Boston Society of Natural History. Price lists of Museum publications are available on request.

Peabody Museum of Archaeology and Ethnology

Harvard University
11 Divinity Avenue
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2253 (Area code: 617)

The Peabody Museum maintains a library of books, journals, and pamphlets on ethnology, archaeology, and cultural and physical anthropology. One specialty is material on Central American and Mexican archaeology and linguistics. Literature is not collected on Indian wars, non-American linguistics, or classical archaeology. Languages represented include English, Russian, Italian, Spanish, French, German, and the Scandinavian and East European languages.

Reference and document services are provided. Books and journals may be consulted in the library; interlibrary loan services are available, but loan of journals is restricted.

Publications available for sale include *Papers of the Peabody Museum, Memoirs of the Peabody Museum,* and *Harvard African Studies,* all of which are volume series; *American School of Prehistoric Research Bulletins; Annual Report of the Peabody Museum;* and *Russian Translation Series.* A catalog of Museum publications is available on request.

Phillips Library

Harvard College Observatory
60 Garden Street
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2683 (Area code: 617)

Phillips Library of the Harvard College Observatory has an extensive collection of technical literature in the fields of astronomy and astrophysics. In addition to books, journals, and reports, there is a collection of half a million astronomical photoplates. Foreign literature includes material in Russian, French, and German.

All books, journals, and reports are available for on-site reference, and most are available on interlibrary loan.

Information on transient astronomical phenomena, such as comets, novae, and flare stars, is disseminated on the *Harvard Announcement Cards,* which are available on a subscription basis. Research reports, journals articles, and theses are also issued. An annual bibliography of observatory publications is available on request.

Physics Research Library

Harvard University
Lyman Laboratory, Room 334
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2878 (Area code: 617)

The Library has a working collection of books and journals in pure physics. Material is collected in English, Russian, French, and German. Books may be consulted in the Library. There is no interlibrary loan service.

Statistics Library

Harvard University
2 Divinity Avenue
Cambridge, Mass. 02138
Telephone: 868–7600 Extension 2584 (Area code: 617)

The Statistics Library maintains a collection of books and journals in statistics, statistical theory, and applied statistics. Books and periodicals may be consulted in the Library and borrowed on interlibrary loan.

HAWAIIAN ENTOMOLOGICAL ASSOCIATION

1527 Keenaumoku Street
Honolulu, Hawaii 96814
Telephone: 564–543 (Area code: 808)

This statewide association has a library of books, journals, reports, and nonprinted material on entomology. On-site reference is available. The annual *Proceedings of the Hawaiian Entomological Society* is obtainable on request at cost plus mailing charges.

HAWAII MEDICAL LIBRARY

510 South Beretania Street
Honolulu, Hawaii 96813
Telephone: 565–370 (Area code: 808)

The Hawaii Medical Library maintains a collection of books, journals, reports, and films and photos related to all aspects of medicine. There is a special collection of Oriental medical journals. Reference and document services are available to persons in the medical profession and in related fields. The Library is open for on-site use by the public.

HAYES INTERNATIONAL CORPORATION

Municipal Airport
P.O. Box 2287
Birmingham, Ala. 35201
Telephone: 592–0011 (Area code: 205)

The Corporation's library functions as an information center on electronics; airborne targets; training, test, and special equipment; space vehicle and missile systems; and maintenance and modification of military equipment. Holdings consist of books, journals, reports, patents, films and photos, map and chart, data, and nonprinted material.

The material is available for loan and on-site use only.

HAZLETON LABORATORIES, INC.

P.O. Box 30
Falls Church, Va. 22046
Telephone: 532–5800 (Area code: 703)

For a fee or on a contract basis, this commercial organization provides consulting services and performs research in the life sciences and chemistry, including toxicology, biometrics, pharmacology, radiobiology, marine biology, organic and analytical chemistry, biochemistry, microbiology, histology, pathology, tissue culture, cancer chemotherapy, electron microscopy, behavioral sciences, primate test animals, and gnotobiotics. Information is restricted to the client sponsoring a particular project.

The Company is copublisher with Information for Industry, Inc. of the multivolume *Food and Color Additives Directory,* which lists additives and the official actions taken by the U.S. Food and Drug Administration pertaining to them. The *Directory,* with a monthly revision service, is available on subscription.

HEALTH LAW CENTER, *See* UNIVERSITY OF PITTSBURGH

HELIUM RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

HERB SOCIETY OF AMERICA

Horticultural Hall
300 Massachusetts Avenue
Boston, Mass. 02115
Telephone: 536–7136 (Area code: 617)

A nonprofit foundation, the Society places its primary emphasis on the medicinal and culinary uses of plants. Information is also disseminated on the culture of herbs, location of herb gardens, identification of herbs, and advice is given on where to buy herbs. Reference material is available on ancient and modern plant lore.

Information is provided without charge. The annual *Herbarist* and special pamphlets on various aspects of herb culture and plant lore are for sale.

HERCULES RESEARCH CENTER

Wilmington, Del. 19899
Telephone: 994–4401 (Area code: 302)

Affiliated with the Hercules Powder Company, the Center has a Technical Information Division which acquires and processes information from sources in all major languages relating to cellulose products, explosives, naval stores, papermaking and synthetic chemicals, physical chemistry, chemical engineering, coatings, and plastisc and elastomers.

Reference, consulting, translating, and document services are restricted to employees of the Company and Government agencies related to the defense effort. Interlibrary loans of nonproprietary material are made.

HIGH ALTITUDE OBSERVATORY, *See* NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

HIGHLANDS BIOLOGICAL STATION, INC.

Highlands, N.C. 28741
Telephone: 3875 (Area code: 704)

The Station performs basic biological research and provides facilities for study of the southern Appalachian region to determine patterns of forest distribution and development, and the role of a headwater escarpment complex in regional animal and plant distribution. Investigations deal with botany, zoology, physiology, ecology, evolution, biological development, and biota of gorge areas.

Requests for use of the facilities, for grants, and for information should be addressed to the Executive Director.

HIGH VOLTAGE ENGINEERING CORP.

South Bedford Street
Burlington, Mass. 01803
Telephone: 272–1313 (Area code: 617)

The Corporation is concerned with the development, manufacture, and testing of particle accelerators and with their application to research in nuclear physics, biophysics, radio biology, radiation chemistry, electron beam sterilization, neutron activation analysis, radioisotope production, solid state physics, radiation damage, aerospace environment simulation, micrometeoroid simulation, industrial processing, and cancer therapy. Technical information originated by the Corporation relates primarily to Van de Graaff electrostatic accelerators and insulating core transformer types.

Librarians may use the collection for on-site reference. Inter-library loan service is provided. Various technical brochures are available free on request.

HIGHWAY RESEARCH BOARD, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

HOFFMANN-LA ROCHE, INC.

Kingsland Street
Nutley, N.J. 07110
Telephone: 667–5000 (Area code: 201)

The Library and the Scientific Literature Department of Hoffmann-La Roche, Inc., provide informational support to the organization's pharmaceutical research facilities. Books and journals are collected on drugs, pharmaceutical chemistry, aromatic and agricultural chemicals, vitamins, synthetic organic chemistry, chemotherapy, and pharmacology. Literature is collected in all major European languages.

Bibliographies are compiled; translations and literature searches are made; and indexes are prepared of articles from the current published literature. Data contained in internal reports and correspondence are indexed separately. The literature searching services of the parent organization in Basel, Switzerland, are available. Document and reference services are restricted to Company technical personnel, with rare exceptions. Interlibrary loan service is exchanged with institutions having similar subject interests.

HOMER RESEARCH LABORATORIES, *See* BETHLEHEM STEEL COMPANY

HUGHES AIRCRAFT CO.

Electronic Properties Information Center

Florence Avenue and Teale Street
Culver City, Calif. 90232
Telephone: 398–2711 (Area code: 213)

The Center has developed a system for abstracting, indexing, and retrieving information on the electrical and electronic properties of insulator and semiconductor materials. Input consists of documents acquired through retrospective search of the literature, extending back to 1940 and covering all major languages. Selected documents are evaluated, abstracted, and indexed by subject specialists. Property data for individual materials are compiled into data sheets, in tabular or graphic form, which are accompanied by the references cited. Summary reports are also prepared. These include data sheets, abstracts, and other supplementary information.

The Center furnishes bibliographies in response to inquiries. Substantive answers to specific questions are provided by a professional staff and are documented by pertinent data sheets and abstracts. Requests may be made for inclusion on the distribution list used for dissemination of data sheets and summary reports at time of publication.

The Center serves primarily U.S. Department of Defense agencies and contractors, but will handle other inquiries as time permits. Personal visits are possible, but are discouraged because of security regulations.

HUMBLE OIL AND REFINING CO.

Houston Research Library

Post Office Box 2180
3120 Buffalo Speedway
Houston, Tex. 77001
Telephone: 529–4471 Ext. 541 (Area code: 713)

The Library has a collection of books, journals, reports, patents, maps and charts, and data on geology, geophysics, chemistry, physics, mathematics, chemical engineering, civil engineering, petroleum engineering, mechanical engineering, operations research, statistics, and business management.

Published material may be consulted on site by advance arrangement or borrowed through interlibrary loan. Company material is for internal use only.

ILLINOIS INSTITUTE OF TECHNOLOGY

IIT Research Institute

10 West 35th Street
Chicago, Ill. 60616
Telephone: 225–9600 (Area code: 312)

Formerly the Armour Research Foundation, the IIT Research Institute conducts sponsored research for Government and industry in all the physical sciences, with particular emphasis on chemistry and chemical engineering. There are projects in Europe, Asia, and South America as well as in the United States. Areas of interest cover organic and inorganic chemistry; ceramics; minerals and geology; electrical engineering and electronics; heat and power; fluid dynamics and systems; metals; small arms; propulsion; international technology, industry, and agriculture; and technoeconomics. The reference library of the Institute is open to the public. Sources of information, in addition to the Institute's own data collections, are the holdings of the John Crerar Library, located on the IIT campus.

Information services are performed on a contract basis for Government and industry by the Technical Information Research Section of the Institute. Technical consultations are provided; a reference and document service is available; and translations are made.

The Technical Information Research Section also manages the National Registry of Rare Chemicals, which serves as a clearinghouse for sources of rare organic and inorganic chemicals not readily available commercially. The collection consists primarily of industrial literature and technical correspondence, but includes reports, journals, and books. A free reference service by mail and telephone is provided to locate sources of rare chemicals. Requesters are asked to use *Chemical Abstracts* for nomenclature when naming the compound. The Registry is not open to the public.

Institute of Gas Technology

17 West 34th Street
Chicago, Ill. 60616
Telephone: 225–9600 (Area code: 312)

An educational and research facility for the gas industry, and affiliated with the Illinois Institute of Technology, the Institute of Gas Technology has three major objectives: To train engineers in gas technology; to perform basic and applied research in the fields of natural and manufactured gas production, transmission, storage, distribution, and utilization; and to collect and disseminate scientific information for the gas industry. Areas of research include the properties of gases; analytical methods, such as the use of gas chromatography; flow of gases; combustion; gasification reactions; production; and engineering, such as natural gas fuel cells, internal coatings for pipes, and distribution network calculations. The Institute operates large-scale pilot plants for semiplant-scale testing of new gas-making processes.

The Institute maintains an Information Service to disseminate research findings to the gas utility industry. There is a collection of books, journals, technical reports, and patents relating to all aspects of gas technology. Foreign literature includes British, German, Russian, French, and Indian technical journals. The Information Service answers technical questions; conducts literature and patent surveys; prepares bibliographies; makes translations of foreign scientific literature; and provides document photoduplication and microfilming. The library is open to the public; reference and referral services are free. There is a charge for other services.

Serial publications issued by the Institute include the *Research Bulletin Series,* presenting data on completed projects, and *Technical Reports,* disseminating data on specific phases of current projects. Both are available for purchase. *Gas Abstracts,* a monthly abstract bulletin of current American and foreign literature on gas technology, is obtainable on subscription. Photocopies of back numbers of *Gas Abstracts* and microfilms of all articles abstracted in *Gas Abstracts* are offered at cost. The Institute's *News Letter,* issued quarterly, is distributed free.

ILLINOIS NATURAL HISTORY SURVEY

Natural Resources Building
Urbana, Ill. 61803
Telephone: 344–0491 (Area code: 217)

A Research and Science Branch of the State of Illinois, the Natural History Survey maintains a library of books, journals, and reports on various aspects of natural history, including economic entomology, surveys of fauna, insect identification, aquatic biology, applied botany and plant pathology, and wildlife. Material is collected in all major languages. The library maintains its own exchange arrangements with some 600 worldwide institutions and organizations.

The collection is open to the public for on-site reference. Direct loans of material are restricted to the Survey staff; interlibrary loans are available through the University of Illinois Library. Publications issued regularly by the Survey include *Biological Note,* the *Bulletin,* and *Circulars.*

ILLINOIS STATE GEOLOGICAL SURVEY

Natural Resources Building
Urbana, Ill. 61803
Telephone: 344–1481 (Area code: 217)

The Illinois State Geological Survey explores and contracts research on the occurrence, development, and use of mineral resources of Illinois, including coal, oil and gas, limestone and dolomite, clay and shale, silica sand, sand and gravel, fluorspar, lead, zinc, silver, ganister, and tripoli. Laboratory analysis and testing by analytical, x-ray, spectrographic, and microchemical methods are carried out to determine the physical and chemical properties of mineral materials. The Survey cooperates with the U.S. Geological Survey in the topographic mapping of Illinois and with the U.S. Bureau of Mines in collecting statistics on annual mineral production in Illinois. It maintains a collection of drillers' logs, electric and gamma ray logs, diamond drill core records, and samples of drill cores and cuttings, as well as a collection of books, journals, reports, and topographic maps.

Technical questions are answered; consulting services are provided only when the type of information sought is not readily available elsewhere. No fees are charged. Collections are accessible for direct use by visitors. Data compilations are prepared upon request.

Periodic publications of the State Geological Survey include monthly drilling reports on oil and gas activities in Illinois, quarterly oil and gas development maps, and annual reports on mineral production and on oil and gas industries. Other publications issued are bulletins, reprints of journal articles, reports of investigations, circulars, industrial mineral notes, coal maps, and topographic maps. Some publications are free; others are for purchase. Announcement literature is available on request.

ILLUMINATING ENGINEERING RESEARCH INSTITUTE

345 East 47th Street
New York, N.Y. 10017
Telephone: 752–6800 (Area code: 212)

Organized through trust agreement with the Illuminating Engineering Society, the Institute has as its function the planning and execution of a research program to establish the basis for the application of light to all habitable activity. Its work is carried out by university researchers and practicing engineers. Through constant study of the needs of basic knowledge, it is prepared to counsel on problems involving principles of application both to the general public and to the IES.

The Institute holds symposia in both North America and Europe to acquaint the public with its progress and to stimulate researchers abroad to complementary activity. *Proceedings* of the symposia are published.

Results of specific research findings are published in *Illuminating Engineering,* the journal of the Illuminating Engineering Society. Progress reports are publicized in the Institute's *Annual Reports* and *Newsletters,* issued three to four times per year.

ILLUMINATING ENGINEERING SOCIETY

345 East 47th Street
New York, N.Y. 10017
Telephone: 752–6800 (Area code: 212)

Organized to advance and disseminate theoretical and practical knowledge of the science and art of illumination, the Society studies and promotes the application of lighting to all areas of life; interests include the somatic and psychological effects of light on the human organism and color. Through the associated Illuminating Engineering Research Institute, research contracts are awarded to universities and laboratories.

Material in the Society's master file of published data is available for reference or loan to members and the general public. Requests for technical information from both the public and IES members are answered without charge.

Developments in illumination techniques of applied lighting and Society and industry news are reported in *Illuminating Engineering,* published monthly. The *IES Lighting Handbook* contains all basic information on light, vision, and current lighting techniques and applications. Studies by the many IES committees are published as *American Standards* and *Recommended Lighting Practices,* a series of booklets describing lighting systems appropriate for particular areas. The *IES Committee Reports* contain lighting recommendations based on studies of lighting problems peculiar to a given industry or operation. Actual lighting installations are described individually, complete with photographs, drawings, and engineering data, in an annual series of 24 *IES Lighting Data Sheets.* The Society also issues measurement and testing guides. All these publications are available for purchase.

INDIANA UNIVERSITY

Unless otherwise indicated, the libraries of Indiana University are available to anyone for on-site reference. Direct loans are made only to students, faculty, and staff; interlibrary loans are available to others.

Aerospace Research Application Center

Indiana University
Union Building
Bloomington, Ind. 47405
Telephone: 337–7833 (Area code: 812)

Sponsored by the National Aeronautics and Space Administration and by private industry and administered by Indiana University, the Aerospace Research Applications Center is concerned with methods of channeling knowledge and information from NASA research efforts to industry for the development of consumer products. Emphasis is placed on industrial establishments of the Midwest. The Center maintains a complete collection of NASA documents and indexes in printed form or on microfilm and other reports and books in aerospace science and technology. Foreign literature includes material in Russian, Italian, Spanish, French, and German.

The Center answers technical inquiries, provides information regarding potential industrial applications of research findings derived from the current space program, and retrieves reference citations to NASA documents. Bibliographies and translations are also prepared. All services, including the loan of documents and the use of the Center's technical library, are limited to member companies on a fee basis.

Anatomy-Physiology Library

Indiana University
Meyer Hall
Bloomington, Ind. 47405
Telephone: 337–3342 (Area code: 812)

The Library covers all areas related to medicine and the treatment of disease, including anatomy, physiology, bacteriology, chemistry, and pathology. Material consists of books, journals, reports, films and photos, and charts; publications are in English, Russian, Italian, Spanish, French, and German.

Astronomy-Physics-Mathematics Library

Indiana University
Swain Hall
Bloomington, Ind. 47405
Telephone: 337–3309 (Area code: 812)

The Library has a collection of books, journals, reports, and data in all major languages on astronomy, mathematics, and physics, including astrophysics, mechanics, cosmic rays, field theory, high-energy particles, and nuclear physics.

Biology Library

Indiana University
Jordan Hall
Bloomington, Ind. 47405
Telephone: 337–6950 (Area code: 812)

Holdings consist of books, journals, films and photos, and microfilms in bacteriology, botany, and zoology. Languages represented are English, Russian, Italian, Spanish, French, and German.

Chemistry Library

Indiana University
Bloomington, Ind. 47405
Telephone: 337–7830 (Area code: 812)

Subject coverage includes agricultural, organic, inorganic, pharmaceutical, physical, quantum, and legal chemistry; biochemistry; radiochemistry; electrochemistry; histochemistry; microchemistry; spectrochemistry; stereochemistry; and thermochemistry. Literature in all major languages is represented.

Culture Collection of Algae

Indiana University
Bloomington, Ind. 47405
Telephone: 337–5353 (Area code: 812)

The Collection was established to serve as a source of cultures for use in research and teaching. Specimens available are microscopic algae belonging mainly to the Phyla Chlorophyta, Chrysophyta, and Cyanophyta; some are bacteria-free. The cultures may be obtained for a fee by any interested individual or organization, both academic and commercial. A list of stocks is furnished free on request.

Geology Library

Indiana University
1005 East 10th Street
Bloomington, Ind. 47405
Telephone: 337–7170 (Area code: 812)

The Library supports study in geology, including economic geology, geochemistry, geomorphology, geophysics, glacial geology, paleontology, mineralogy, petroleum geology, petrology, sedimentology, stratigraphy, structural geology, hydrogeology, and meteorology. Both domestic and foreign publications are acquired in all major languages, including English, Russian, Italian, Spanish, French, and German.

School of Dentistry Library

Indiana University
1121 West Michigan Street
Indianapolis, Ind. 46222
Telephone: 635–8431 Extension 2473 (Area code: 317)

Primarily for the use of faculty, students, and personnel of the School of Dentistry and the Medical Center campus, the Library maintains a collection on dental caries, crown and bridgework, oral diagnosis, dental education, endodontics, fluorides, history of dentistry, oral hygiene, dental materials, operative dentistry, orthodontics, oral pathology, pedodontics, periodontics, dental practice, prosthodontics, and oral surgery. Literature in English, Russian, Italian, Spanish, French, German, Japanese, and the Scandinavian languages comprise the holdings.

The public is allowed limited use of the collection for on-site reference or for loans. Interlibrary loan service is provided.

School of Medicine Library

Indiana University
1100 West Michigan Street
Indianapolis, Ind. 46222
Telephone: 635–8431 (Area code: 317)

The collection consists of books, journals, and reports in medicine, nursing, and allied subjects. Russian, Italian, Spanish, French, German, Dutch, Hebrew, Portuguese, Flemish, Czechoslovakian, and Japanese sources are included.

Materials may be used on site without charge by any citizen of the State. Bibliographic assistance and personal loan privileges are extended to all physicians and persons in allied professions in the State. Loan to the lay public is possible only through interlibrary loan. Photocopying is available for a fee.

INDUSTRIAL RESEARCH INSTITUTE, INC.

100 Park Avenue
New York, N.Y. 10017
Telephone: 683–7627 (Area code: 212)

Sponsored by manufacturers and firms maintaining industrial research laboratories, the Institute promotes improved techniques in the management and administration of research organizations with particular reference to industrial research. It has a library which is available only to member companies. However, as a public service, the Institute will answer questions relating to its field of interest.

Research Management, a bimonthly publication, is available by subscription.

INDUSTRIAL TECTONICS, INC.

Bearing Division

18301 Santa Fe Avenue
Compton, Calif. 90221
Telephone: 636–9941 (Area code: 713) TWX Compton 6032

The Division maintains a library containing technical information on rolling-contact, sleeve, and fluid-film bearings. Emphasis is on analysis, design, test data, field performance, and research and development results as they apply to ultraprecision antifriction ball and roller bearings, special materials, and alloys. The collection includes English, Russian, French, and German material.

Information services available to industry and research organizations on a fee or contract basis include technical consultations, state-of-the-art reviews, literature searches, bibliographic compilations, and data evaluations and analyses.

Periodicals issued are *Tech-Tonics* and the *ITI News Release.*

INFORMATION FOR INDUSTRY, INC.

1000 Connecticut Avenue NW.
Washington, D.C. 20036
Telephone: 296–4936 (Area code: 202)

A commercial organization, IFI is concerned with documentation and information, including indexing, abstracting, computer storage and retrieval, information flow, planning of technical libraries, and microfilming. Its Information Retrieval Center provides business, legal, and scientific information in such areas as chemical patents; resins, rubbers, and plastics; natural and synthetic fibers; and food color additives. Material stored at the Center consists of information contained in books, journals, reports, patents, films and photographs, and nonprinted material. English, Russian, Japanese, Italian, French, and German sources are represented.

Consulting and related services in information processing are available; fees are determined on an individual basis.

IFI issues a number of publications. *Uniterm Index to U.S. Chemical Patents,* bimonthly, groups the pertinent information contained in a patent under certain key access words; all related data appear under appropriate subject headings. A magnetic tape edition is also offered. *Resins, Rubbers, Plastics,* a semimonthly, and *Natural and Synthetic Fibers,* issued monthly, provide access to the world's literature within their subject area. Produced jointly with Hazleton Laboratories, Inc., the *Food and Color Additives Directory* is a five-volume publication containing references to Federal Register notices of actions pending before, or actions taken by the Food and Drug Administration in connection with food and color additives. All these publications are available on subscription.

INFRARED INFORMATION AND ANALYSIS CENTER, *See* UNIVERSITY OF MICHIGAN

INSECT DIAGNOSTIC SERVICE, *See* UNIVERSITY OF CALIFORNIA, BERKELEY

INSTITUTE FOR ATOMIC RESEARCH, *See* IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

INSTITUTE FOR FISHERIES RESEARCH

University Museums Annex
North University Avenue
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 484 (Area code: 313)

Functioning as the research branch of the fish division of the Michigan Department of Conservation, the Institute conducts inventories of Michigan's waters to determine physical and chemical features; makes special studies of fish, fish foods, fish ecology, and natural history; and serves as an information source to Department of Conservation administrators regarding the proper management of sport fisheries of the state.

Technical questions are answered without charge; staff biologists occasionally serve as consultants in private capacity.

Publications of the Institute, including technical reports, journals, articles, special studies and data compilations, pamphlets and maps of lakes and streams, are listed in the *Catalog of Publications,* which is available free on request. There is a charge for maps. Publications are free to fisheries research workers in other states and countries on an exchange basis. There is a charge to the public for some publications; others are free.

INSTITUTE FOR MUSCLE DISEASE, INC.

515 East 71st Street
New York, N.Y. 10021
Telephone: 988-6800 (Area code: 212)

The Institute was founded by the Muscular Dystrophy Associations of America, Inc. to study neuromuscular disorders, to increase knowledge of muscle, to study mechanisms by which muscular dystrophy and other muscular disorders arise, and to develop effective treatment for these conditions. Specialized sections deal with physiology and biophysics, enzyme chemistry and microbiology, experimental pathology, protein chemistry, clinical investigation, organic chemistry, and biochemistry.

The Institute's library is open to the public by special permission. The material is available at all times to the professional staff of the Institute and to outside professional personnel on an interlibrary loan basis. A muscle registry is anticipated, consisting of microscopic slides and micrographs, accompanied by case histories, which will illustrate various forms of muscle disorders found throughout the world.

INSTITUTE FOR RESEARCH IN VISION, *See* OHIO STATE UNIVERSITY

INSTITUTE FOR SCIENTIFIC INFORMATION

33 South 17th Street
Philadelphia, Pa. 19103
Telephone: 564-4400 (Area code: 215)

The Institute publishes scientific and technical literature announcements and abstract journals, the input for which is screened, coded, and indexed. Subjects covered are the biological, physical, and medical sciences, with particular emphasis on chemistry, pharmacology, nuclear physics and engineering, astronautics, electronics, metallurgy, geology, aircraft and missiles, and documentation. Sources in English, Russian, Japanese, Italian, Spanish, French, German, and the Scandinavian languages are used.

Consulting services are provided in dissemination and retrieval techniques for a fee. Subscribers may purchase tear sheets of original articles.

Current Contents, available by subscription, has editions in the life sciences and space and physical sciences, each published weekly. The two editions contain reproductions of the tables of contents of current American and foreign journals, as well as directories of authors, listing thier associations and addresses.

Index Chemicus abstracts journal articles graphically, using the chemical structural diagram, molecular formulae, article title, author abstract, dates of submission and publication, and authors' names and addresses. In each issue, there is also a subject index, a molecular formula index, an author index, and a journal index for retrospective searching. Approximately 100,000 compounds are listed and indexed each year; all biweekly indexes are cumulated quarterly and anually. *Index Chemicus* is available by subscription.

Science Citation Index, published quarterly and annually, is also available by subscription. It lists bibliographic citations from the worldwide literature of science and technology. It is a directory of cited references, each accompanied by a list of current citing source documents. It also includes a source index with article titles for all source items processed for the *Science Citation Index.*

INSTITUTE OF ARCTIC AND ALPINE RESEARCH, *See* UNIVERSITY OF COLORADO

INSTITUTE OF ATMOSPHERIC PHYSICS, *See* UNIVERSITY OF ARIZONA

INSTITUTE OF BOILER AND RADIATOR MANUFACTURERS

608 Fifth Avenue
New York, N.Y. 10020
Telephone: 582-5310 (Area code: 212)

The Institute sponsors an information center and, in affiliation with the Department of Mechanical Engineering of the University of Illinois, a laboratory and research facility. Fields of interest are heating equipment, including boilers, radiators, water heaters, valves, controls; baseboard radiation; finned tube radiation; hot water heating; steam heating; heating equipment output; and heating equipment installation.

Publications issued by the Institute comprise technical reports, standards and specifications, and data handbooks, including calculation and installation guides for heating equipment and testing and rating codes for determining outputs of heating equipment.

INSTITUTE OF GAS TECHNOLOGY, *See* ILLINOIS INSTITUTE OF TECHNOLOGY

INSTITUTE OF LABORATORY ANIMAL RESOURCES, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

INSTITUTE OF MARINE BIOLOGY, *See* UNIVERSITY OF PUERTO RICO

INSTITUTE OF MARINE SCIENCE, *See* THE UNIVERSITY OF TEXAS

INSTITUTE OF MICROBIOLOGY, *See* RUTGERS—THE STATE UNIVERSITY

INSTITUTE OF MINERAL RESEARCH, *See* MICHIGAN TECHNOLOGICAL UNIVERSITY

THE INSTITUTE OF PAPER CHEMISTRY

1043 East South River Street
Appleton, Wis. 54910
Telephone: 734–9251 (Area code: 414)

The Institute of Paper Chemistry is a graduate school whose faculty and additional scientific staff conduct research in sciences directly concerned with, and related to, pulp, paper, and paperboard. Besides its own program, the Institute performs research by contract for its member pulp and paper companies, for other industries interested in the field, and for the Government.

The research staff provides specialization in forestry and forest genetics; pulping; bleaching; refining; chemical engineering; paper and paperboard converting; wood chemistry; fiber microscopy; cellulose and carbohydrate chemistry; lignin chemistry; general organic, inorganic, and physical chemistry; physics; mineralogy; aquatic biology; microbiology; plant biochemistry; special processes; plastics, textiles, and packaging application; graphic arts; starch and other paper finish components; instrumentation and testing.

The Institute's library receives regularly patent registers of 5 countries and journal and periodical literature of approximately 30. Other materials are books, dissertations, proceedings of meetings, pamphlets, microfilms, and informational advertisements. Two dozen languages are represented, including English, Russian, Italian, French, Spanish, German, Czech, Polish, Ukranian, Byelorussian, Swedish, Norwegian, Danish, Dutch, Hungarian, Rumanian, Portuguese, and Finnish. All research inquiries are welcomed. Services include extensive consultations; bibliographies, regular and special; literature searches; state-of-the-art reviews; compilations; correlations; reference lists on areas or phases of the paper industry; translations; reference identification and location; lending of any of more than 200 Institute doctoral theses; and photocopies of any archival items. The library is open to the public.

The Dard Hunter Paper Museum, located on the Institute's campus, contains artifacts, materials, and publications related to the history of papermaking from its invention to the introduction of machines.

The Abstract Bulletin of the Institute of Paper Chemistry, available by subscription, is the control publication of pulp and paper scientific literature. It publishes monthly abstracts and identification of all literature pertinent to pulp and paper, including patents, journal and periodical literature, dissertations, and reports. Other publications include technical reports, bibliographic series, academic catalogs, microcard patent service, conference proceedings, and informational pieces.

INSTITUTE OF POLAR STUDIES, *See* OHIO STATE UNIVERSITY

INSTITUTE OF SANITATION MANAGEMENT

55 West 42d Street
New York, N.Y. 10036
Telephone: 736–4755 (Area code: 212)

A professional society, the Institute disseminates information on industrial and institutional sanitation, including housekeeping, building maintenance, insect and rodent control, maintenance of personnel facilties, and food industry sanitation. Questions from the public of a practical nature are answered without charge. Inquirers with more scientific and technical questions are referred to individuals or to other organizations. For extensive studies, advice, or guidance, the names of professional technical consultants are available. No literature searches or reference services are performed.

The Institute also publishes *Technical Bulletins* and a monthly *Newsletter*.

INSTITUTE OF SCIENTIFIC RESEARCH, *See* NEW MEXICO HIGHLANDS UNIVERSITY

INSTITUTE OF SCRAP IRON AND STEEL, INC.

1729 H Street NW.
Washington, D.C. 20006
Telephone: 298–7660 (Area code: 202)

Information is disseminated by the Institute on the generation, consumption, uses, marketing, production, and processing of scrap iron and steel. Reference, consulting, and document services are available. The *Yearbook*, containing statistics and other information on the scrap processing industry, may be purchased.

INSTITUTE OF TEXTILE TECHNOLOGY

U.S. Highway 250 West
Charlottesville, Va. 22901
Telephone: 293–2214 (Area code: 703)

Supported by textile mills located in the eastern part of the United States, the Institute conducts cooperative research on textile materials and processes, trains graduate students in the fundamental sciences and in textile technology, and keeps member mills informed of scientific and technical developments in the textile industry throughout the world.

The library of the Institute has books, periodicals, pamphlets, patents, trade literature, translations, standards, newspaper clippings, and Government publications on textile technology and related sciences. Foreign journals concerned with textile literature and patents are received, including English, French, Spanish, Italian, Russian, Japanese, and German publications. The collection is available to nonmembers for on-site reference and through interlibrary loan. Consulting, translating, literature survey, and document and photocopying services are provided for a fee. Research reports and literature surveys prepared by the Institute are usually restricted to the membership.

The *Textile Technology Digest,* a monthly reporting service covering information on fiber science, textile machinery, production techniques, testing, quality control, instruments, and their application, chemical finishing, and other related topics may be obained by subscription.

INSTITUTE OF TRAFFIC ENGINEERS

Suite 506
1725 DeSales Street NW.
Washington, D.C. 20036
Telephone: 638–4818 (Area code: 202)

A national professional society, the Institute is concerned with the planning, design, and operation of streets and highways, including research in traffic engineering techniques and associated control devices and their effect on traffic and road safety. The Institute provides answers to traffic engineering questions either directly or through reference to bibliographic sources or referral to ITE members. This information does not extend into the area normally handled by traffic engineering consultants, and the Institute does not recommend the services of specific consultants.

Publications include *Traffic Engineering,* a monthly journal; an annual *Yearbook*; conference proceedings; state-of-the-art reviews; standards; and specifications. All are available for purchase.

INSTITUTE OF TRANSPORTATION AND TRAFFIC ENGINEERING, *See* UNIVERSITY OF CALIFORNIA

INSTITUTE OF TROPICAL METEOROLOGY, *See* UNIVERSITY OF PUERTO RICO

INSTITUTE OF WOOD RESEARCH, *See* MICHIGAN TECHNOLOGICAL UNIVERSITY

INSTRUMENTATION INFORMATION CENTER, *See* U.S. DEPARTMENT OF COMMERCE, NATIONAL BUREAU OF STANDARDS

INSTRUMENT SOCIETY OF AMERICA

530 William Penn Place
Pittsburgh, Pa. 15219
Telephone: 281–3171 (Area code: 412)

A professional technical organization, the Society maintains a library and information service at its headquarters. Literature in English, including journals translated from Russian, is available. Much of the material consists of reports issued by the Society's committees on research and development, instrument operation and maintenance, testing and analysis instrumentation, instrumentation for inspection and gaging, instrumentation for production processes and transportation, medical instrumentation, physical properties measurement, and recommended practices for the use and care of instrumentation.

The library is open to the membership; other interested persons may submit questions to the staff. If time is available for research, no charge will be made for services provided.

The *ISA Journal,* a monthly, and *ISA Transactions,* published quarterly, are the primary periodicals. The Society also issues the followinug translations of Russian journals, obtainable by subscription: *Measurement Techniques* (Izmeritel'naia tekhnika), monthly; *Instruments and Experimental Techniques* (Pribory i tekhnika eksperimenta), bimonthly; *Automation and Remote Control* (Avtomatika i telemekhanika), monthly; and *Industrial Laboratory* (Zavodskaia laboratoriia), monthly.

INTERNAL DOSE INFORMATION CENTER, *See* OAK RIDGE NATIONAL LABORATORY

INTERNAL REVENUE SERVICE, *See* U.S. DEPARTMENT OF THE TREASURY

INTERNATIONAL BUSINESS MACHINES CORP.

Data Processing Program Information Department

112 East Post Road
White Plains, N.Y. 10601
Telephone: 949–1900 (Area code: 914)

The Department acquires, abstracts, and disseminates computer programs. There are four types of programs in the collection: IBM-produced programs, system oriented; IBM-produced programs, industry oriented; voluntarily contributed programs produced by IBM systems engineers in the field; and programs voluntarily contributed by IBM customers.

The IBM-produced programs must be requested through the local sales offices. Contributed programs may be requested directly.

A monthly *Catalogue of Programs* is for sale.

Thomas J. Watson Research Center Library

Post Office Box 218
Yorktown Heights, N.Y. 10598
Telephone: 945–1418 (Area code: 914)

The collection of the Library is devoted to all aspects of electronic data processing research and engineering, with emphasis on computer technology. Material consists of books, journals, and reports in English, Russian, Italian, French, Spanish, and German.

Consulting, reference, and copying services are available. Inhouse material is limited to IBM employees and consultants. Nonproprietary information is available in response to specific requests.

The *IBM Journal of Research and Development* is obtainable on subscription from IBM, 590 Madison Avenue, New York, N.Y., 10022. The *IBM Systems Journal,* also quarterly, is for internal distribution, except upon request.

INTERNATIONAL NICKEL CO., INC.

67 Wall Street
New York, N.Y. 10005
Telephone: 944–1000 (Area code: 212)

The Company maintains a collection of published information, a data file, and a technical reference file of unpublished material on the properties, fabrication, and use of nickel; nickel alloys; nickel steels; nickel-containing stainless steels; maraging steels; nickel plating; ductile irons; platinum metals; and nickel chemicals. Corrosion, high temperature, and cryogenic data on these and other metallic materials are also available. References to literature in English, Russian, Italian, Spanish, French, and German are included.

Information is provided on request, and access to or copies of internal or published material may be made available on some subjects.

The *Nickel Bulletin* is a monthly abstract journal; *INCO Nickel Topics* describes industrial applications of nickel-containing materials and is published 10 times a year; and *INCO Magazine* and the *INCO Reporter* are issued quarterly. All are distributed free.

INTERNATIONAL OCEANOGRAPHIC FOUNDATION

1 Rickenbacker Causeway, Virginia Key
Miami, Fla. 33149
Telephone: 361–3126 (Area code: 305)

The Foundation provides a scientific information and referral service on all questions relating to marine science, the development of marine resources, and other industrial applications, including the study of game and food fishes; ocean currents; and the geology, chemistry, physics, medicine, and engineering concerning the sea. A cooperative research committee acts as a clearinghouse for the activities of yachtsmen, anglers, or divers who wish to cooperate in scientific research. An advisory council is formed of leading scientists from a number of research institutions.

Questions of general interest are printed in the monthly question-and-answer series, *Sea Secrets,* available by membership subscription. The illustrated magazine, *Sea Frontiers,* which covers progress in marine science for the general reader is also free to members.

ION PHYSICS CORP.

South Bedford Street
Burlington, Mass. 01803
Telephone: 272–2800 (Area code: 617)

A subsidiary of the High-Voltage Engineering Corporation, Ion Physics maintains a technical library of books, journals, reports, and data on ion propulsion, research and development of hardware for electrostatic power generation and high-voltage insulation, cathode research, dielectrics; electrets; charged colloid production and dynamics, accelerator technology, solar cells, solid state radiation detectors, microcircuitry, neutron radiography, ion sources, and sputtering systems. There are special collections on electrostatic generators, vacuum discharges, and high-voltage applications. Sources are in English, Russian, French, German, Dutch, Indonesian, and Malayan.

Reference and document services are Company-oriented; services are provided to others on a fee basis only. Interlibrary loans may be arranged through the Boston Chapter of the Special Libraries Association.

IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

Institute for Atomic Research

Iowa State University of Science and Technology
Box 1129, ISU Station
Ames, Iowa 50012
Telephone: 231–4835 (Area code: 515)

The Institute for Atomic Research administers basic research programs in chemistry, physics, metallurgy, chemical and ceramic engineering, and biology. It trains graduate students in the science and techniques required in the field of atomic energy. It conducts research in nuclear and allied fields for the Federal Government when authorized by contract with Iowa State University. It acts as a central agency for the University in obtaining from the U.S. Government special materials, such as isotopes, radioactive tracers, and special counting instruments.

Research in chemistry includes investigations in physical and inorganic chemistry, radiochemistry, and analytical and structural chemistry, with particular emphasis on the rare-earth elements and other less familiar materials which are destined to play an important role in atomic energy programs in the future. Areas of interest in physics include nuclear studies; thermal and electrical transport properties of metals and alloys; thermal, mechanical, electrical, and optical properties of semiconductors; cohesive energies of metals and semiconductors; diffusion in metals; and surface ionization. Metallurgical investigations cover the preparation of high-purity metals, study of the nature of the metallic state, and the development of special metals and alloys for use in atomic energy projects. In engineering, processes are studied for producing materials of interest to the U.S. Atomic Energy Commission, including ceramics. Experiments are also conducted on a variety of problems associated with the engineering design of reactors. Research in biology includes projects in veterinary physiology, plant physiology, zoology and botany. The Institute operates the Ames Laboratory, one of the National Laboratories of the U.S. Atomic Energy Commission, under a contract between Iowa State University and the AEC.

A working collection of reports in the above fields is available for on-site reference use. Research findings are disseminated in the form of technical reports. Reprints of journal articles prepared by the staff are distributed without charge.

Iowa Agriculture and Home Economics Experiment Station

Iowa State University of Science and Technology
123 Curtiss Hall
Ames, Iowa 50010
Telephone: 231–2116 (Area code: 515)

Consisting of research laboratories and field stations, the Station conducts research and provides information on agricultural economics and marketing, the plant and animal sciences, and home economics and nutrition. Specific areas of interest include agricultural engineering, agronomy, animal husbandry, dairy and poultry science, bacteriology, biochemistry, biophysics, botany and plant pathology, food technology, economics and sociology, education, entomology, wildlife, forestry, genetics, horticulture, and veterinary medicine.

Technical inquiries are answered and consulting services concerning agricultural problems within the State are available. There is no charge.

Information is also disseminated in reports and bulletins collected or prepared by the Station. Publications are available on loan to anyone; single copies are distributed free of charge or at publishing cost to residents of the State. All publications are provided to libraries on an exchange basis. *Iowa Farm Science*, a monthly journal, is available without charge.

Library

Iowa State University of Science and Technology
Ames, Iowa 50012
Telephone: 231–2951 (Area code: 515)

The University Library stresses the development of files of periodicals and other serials in the basic and applied fields of the physical and biological sciences. Publications in all other subject fields emphasized by the University's programs of instruction and research are also strongly represented in the collections. In addition to interlibrary loan service, the Library makes microfilm and photocopies.

Statistical Laboratory

Iowa State University of Science and Technology
102 Service Building
Ames, Iowa 50010
Telephone: 231–4711 (Area code: 515)

The Statistical Laboratory is a research and service institute which conducts research in statistical theory and methodology, carries out survey-sampling operations, and provides consulting and computing services for the agricultural, biological, engineering, physical, behavioral, and social sciences. Consultations concern statistical analysis and interpretation of data, statistical design of experiments and surveys, statistical methods and techniques, and numerical analysis and computer programing of statistical problems.

Services are provided without charge to research staff and graduate students of the University. There is a fee for services to other departments of the University on their large contractual, off-campus projects. Grant and contractual research of a statistical nature and of mutual interest to the sponsoring agent and the University may be arranged directly with the Laboratory.

Publications issued by the Laboratory include reprints of journal articles written by the staff, an *Annual Report,* and *Statlab Review,* a yearly news journal. These are available without charge.

Systematic Bacteriology Research Group

Iowa State University of Science and Technology
Room 221, Science Building
Ames, Iowa 50010
Telephone: 231–3449 (Area code: 515)

The Systematic Bacteriology Research Group functions as a unit of the Department of Bacteriology of Iowa State University. The major function of the unit is research on the taxonomy and nomenclature of bacteria. Search of the literature, past and current, furnishes the material for index card entries for all published names of bacterial taxa and provides the following data: the scientific name proposed for the taxon; the vernacular name of the taxon if the description antedates the proposal of the scientific name; author citation; category of taxon; validity of publication; legitimacy of the scientific name proposed; objective synonyms; homonyms; and comments to explain anomalies. Names of taxa in all recognized categories, from class to subspecies and in many cases to infrasubspecific forms, are indexed. The master list of scientific names prepared by the Research Group includes about 20,000 entries, covering the period from 1753 to the present, with an additional list of about 5,000 specific and subspecific epithets. The reference list of authors for all names indexed has resulted from examination of the original publication of the name, except in the few cases where copies of original references could not be located. About 5,000 references have been examined.

The Research Group has a file of some 10,000 cataloged reprints and photostats relating to the taxonomy of bacteria gathered from a worldwide search of pertinent literature.

Available in preliminary form is a manuscript containing the combining forms, usually stems, of the Latin, Greek, medieval, and neo-Latin words that have been used or are available for use in making scientific names in microbiology. Included are also the conventional latinized combining forms of chemical terms useful in microbiological nomenclature.

Emphasis is currently placed on the use of computers for diagnosis, correlation of nomenclature, and retrieval of information. Research is also conducted in numerical taxonomy and its practical application and on the quantitative estimation of affinity among organisms, and quantitative estimation and description of taxa by means of computers.

Consultations and literature search services are available to qualified scientists. There is no charge if extensive searches are not required. A self-addressed, stamped envelope should be enclosed for the answering of correspondence. Issued quarterly and available by subscription is the *International Bulletin of Bacteriological Nomenclature and Taxonomy.*

ISOTOPES, INC.

123 Woodland Avenue
Westwood, N.J. 08260
Telephone: 664–7070 (Area code: 201)

The Company has a library collection of material dating from 1950 relating to stable and radioactive isotopes and atomic energy. Coverage emphasizes the subjects of fallout, industrial applications of radioisotopes, hydrology, and radiochemistry.

Access to the collection for on-site use is granted to interested individuals. *Isotopics,* quarterly, is free on request.

JACKSON HOLE BIOLOGICAL RESEARCH STATION, *See* UNIVERSITY OF WYOMING

JET PROPULSION CENTER, *See* PURDUE UNIVERSITY

JET PROPULSION LABORATORY, *See* CALIFORNIA INSTITUTE OF TECHNOLOGY

THE JOHN CRERAR LIBRARY

35 West 33d Street
Chicago, Ill. 60616
Telephone: 225-2526 TWX 431-1758 (Area code: 312)

With resources of over one million volumes and pamphlets, and current subscriptions to more than 11,000 periodicals and serial publications, the John Crerar Library is devoted exclusively to science, technology, and medicine. There are research collections in all the basic sciences with emphasis on general chemistry, biology, physics, and geology. In the applied sciences there are comprehensive collections in all branches of engineering, all branches of medicine, and aspects of agriculture relevant to the chemical and food industries, and the farm machinery and equipment industries. Other holdings include comprehensive coverage of subject indexing and abstracting journals, as well as current patent specifications from France, Belgium, Sweden, and Japan.

Public reference service is given in the Research Services Division, where readers may make free use of the collections through the service desks. Volumes are not lent for home use except to members.

The Library also serves as a Federal Regional Technical Report Center and contains a collection of U.S. Atomic Energy Commission, National Aeronautics and Space Administration, and U.S. Department of Defense unclassified reports in addition to reports of other U.S. Government agencies. This material may be used during regular library hours, and may be borrowed by interlibrary loan in the five-state area served by this center: Illinois, Indiana, Michigan, Minnesota, and Wisconsin.

The Research Information Service of the Library offers library research services on a reimbursable basis. Literature searches, prior art searches relating to patents, and current awareness literature scanning on subjects of interest to clients are done by subject specialists and are issued in the form of abstracts, annotated bibliographies, and reports. Translations from 22 languages are performed on demand. Fees are charged on an hourly basis.

Under contract with the Special Libraries Association, the Library maintains and services a translation center with a collection of more than 85,000 translations of technical articles contributed by Government agencies, industrial firms, and private organizations, including the Russian translations formerly located at the Library of Congress. The center lends copies and supplies photoduplicates of translations in its collection. Inquiries should be addressed to the SLA Translations Center of The John Crerar Library.

Subject to copyright limitations, the Library's photoduplication service offers photocopies of materials owned by the Library in lieu of loans. A price list for this service is available on request.

Membership in the Crerar Library is open to any organization or individual whose interests coincide with the objectives of the Library. Privileges of membership include limited borrowing of library materials.

JOHNS HOPKINS UNIVERSITY

Chemical Propulsion Information Agency

Applied Physics Laboratory
8621 Georgia Avenue
Silver Spring, Md. 20910
Telephone: 589-7700 (Area code: 301)

Operating under contract with the Department of the Navy, the Agency serves as the technical information exchange for the United States chemical propulsion research and development programs. Technical areas of interest include chemical synthesis; manufacturing process development; thermodynamics and thermochemistry; combustion phenomena; physical, chemical, and mechanical properties of propellants; special test equipment and techniques; theoretical performance computations; analytical test techniques; nozzle design criteria; thrust vector control methods and devices; evaluation of hazards and safety measures; and specific materials areas concerning compatibility, structural integrity, and thermal integrity. The CPIA library has extensive collections of solid propulsion reports and post-1956 reports on liquid propulsion.

Technical staff members are assigned to assist authorized visitors in literature searches and in consultative capacity. Representatives of facilities which have facility security clearance and need-to-know in chemical propulsion may visit the Agency.

All requests for publications and other services of the CPIA must be endorsed by one of the sponsoring agencies of the Department of Defense or the National Aeronautics and Space Administration. Publications include: *Chemical Propulsion Abstracts,* a semimonthly, loose-leaf, indexed journal covering confidential and unclassified reports related to chemical propellant and propulsion research: *Liquid Propellant Manual; Propellant Manual; Rocket Motor Manual; Liquid Propellant Test Methods; Handbook of the JANAF Panel on Analytical Chemistry of Solid Propellants;* and *Chemical Propulsion Mailing List.* For military and Government use only are the *Chemical Propulsion Contracts List* and the *Liquid Propellant Engine Manual.*

JOHNSON RESEARCH FOUNDATION, *See* UNIVERSITY OF PENNSYLVANIA

JOINT HIGHWAY RESEARCH PROJECT, *See* MASSACHUSETTS INSTITUTE OF TECHNOLOGY *and* PURDUE UNIVERSITY

JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS, *See* UNIVERSITY OF COLORADO

KANSAS STATE GEOLOGICAL SURVEY

University of Kansas
Lawrence, Kans. 66045
Telephone: 864–3101 (Area code: 913)

4150 Monroe Street
Wichita, Kans. 67209
Telephone: 942–2774 (Area code: 316)

A State agency operated by the University of Kansas, the Geological Survey is responsible for the development of mineral resources within the State. It issues geologic maps, prepares statistics on mineral production, and conducts research to develop new uses for minerals. A report and data collection is maintained on various aspects of geology, including water, gas and oil resources, and mineral production, particularly of Kansas. There is an oil well sample collection at the branch office in Wichita.

Information is available to all potential users of minerals and reference services are provided without charge; there is no fee for consultations in Kansas. Oil well samples are loaned by the Wichita office.

Technical reports prepared by the Geological Survey are for sale.

KARL M. FOX CONSULTING RESEARCH SERVICE & LIBRARY

300 Yale Avenue
Swarthmore, Pa. 19081
Telephone: 543–2801 (Area code: 215)

This commercial firm provides answers to technical questions concerning latex and rubber compounding and fabrication, especially tires and adhesives; plastics fabrication, including film, sheetings, and foam; and paper and textile coating, impregnating, and laminating. This activity is supported by a collection of journals, reports, and industrial technical literature. There are special files of U.S. Government reports, particularly those issued by the Food and Drug Administration on toxicity and NASA documents on technology utilization.

Technical consultant services are available for a fee. Photocopying of material is done at cost. Bibliographies are prepared at hourly rates. A monthly *Research Intelligence Summary* newsletter on industrial literature, technical associations, and unclassified Government research is available on subscription.

KEEVER STARCH CO.

324 Dering Avenue
Columbus, Ohio 43207
Telephone: 444–1158 (Area code: 614)

The Company performs research and collects data on processes, properties, and structure pertaining to starch, starch products derived from flour, and gluten products obtained from flour. Research and data may also be available regarding enzymes and their usage with starch and starch derived products.

Barring competitive conditions, information in these areas is made available on request.

KENTUCKY GEOLOGICAL SURVEY, *See* UNIVERSITY OF KENTUCKY

KENTUCKY STATE HEALTH DEPARTMENT

274 East Main Street
Frankfort, Ky.
Telephone: 227–4531 (Area code: 502)

The Department library maintains a collection of books, journals, reports, films, photos, maps, charts, and data pertaining to public health, including sanitation, engineering, medical care, hospitals, nutrition, maternal and child health, laboratories, and State vital statistics. The material is accessible for on-site use by the public, but borrowing privileges are restricted to Department employees.

LARAMIE PETROLEUM RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

LAWRENCE RADIATION LABORATORY, *See* UNIVERSITY OF CALIFORNIA

LIBRARY OF CONGRESS

First Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 967-8021 (Area code: 202)

The Library of Congress is probably the world's largest library. While its primary purpose is to serve Congress and other Government agencies, it also serves other libraries and the world of scholarship and is a general reference library for public use. Admission is free, and no introductions or credentials are required.

The collections of the Library on June 30, 1963, comprised more than 12,750,000 books and pamphlets on every subject and in a multitude of languages; more than 156,000 bound newspaper volumes and hundreds of thousands of single issues of newspapers and periodicals from all over the world; 18,610,000 manuscripts relating to manifold aspects of American history and civilization; 2,746,000 maps and views; 2,140,000 items of music, from classical to modern; 3,124,000 photographic negatives, prints, and slides; 588,000 fine prints and reproductions; 75,000 motion-picture reels; 252,000 reels and strips of microfilm, of which 112,300 reels contain newspapers on microfilm; and many other items, such as microcards, microprint cards, broadsides, photostats, and posters.

In addition to the two general reading rooms and the Law Library Reading Room, there are a number of reading rooms for special materials. Members of the reference staff are stationed in each of the reading rooms to assist in the use of the catalogs, to refer readers to other bibliographical sources, and to aid in locating material not otherwise readily discoverable. To those engaged in academic research, a limited number of study desks and shelves are available by assignment through the Office of the Stack and Reader Division. Consistent with its primary obligation to satisfy Congressional and other Government requirements, the Reference Department of the Library will also respond as time allows to written requests for bibliographical assistance not available to the requester in his own local public, university, private, or State libraries.

The Library of Congress is primarily a reference library, and its lending functions are restricted almost exclusively to official borrowers or to interlibrary loans. It does, however, offer other services that extend beyond its buildings.

The Photoduplication Service provides photographs, photostats, microfilm, and other photocopies of research materials, subject to copyright and other restrictions.

The National Union Catalog Division maintains and furnishes information about the location of books in approximately 800 libraries in the United States and Canada; the National Union Catalog on cards contains about 15 million entries for titles and editions printed before 1952. Published catalogs in book form continue this card catalog. There is also a National Union Catalog of manuscripts published in book form. Auxiliary union card catalogs record the location of some one million works in Slavic, Hebraic, Japanese, Chinese, and other non-Roman alphabets.

The Library prints catalog cards for its own books and other materials, including films and sound recordings, and it also prints cards produced by cooperating libraries. Copies of all these cards, the catalogs in book form, accession lists, bibliographies, and other guides designed to assist scholars, librarians, and the public may be purchased.

A description of reading room facilities and other information concerning the Library of Congress and its services may be found in *Information for Readers in the Library of Congress,* a brochure which is available without charge by mail from the Office of the Secretary, Library of Congress, Washington, D.C., 20540. An annual listing entitled *Library of Congress Publications in Print* is also mailed free by the Office of the Secretary upon request. Copies of both may be obtained in person from the Library's Information Desk.

Aerospace Technology Division

Library of Congress
First Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 967-8061 (Area code: 202)

The Division exploits open source foreign scientific and technical publications in all subject fields in science and technology directly or indirectly related to aerospace research and development. Material utilized is in Russian, Ukrainian, Byelorussian, Estonian, Latvian, Lithuanian, Georgian, Armenian, Azerbaijanian, Kazakh, Uzbek, Tadzhik, Turkmen, Chinese, Korean, Polish, Czech, Slovak, German, Hungarian, Rumanian, Bulgarian, Albanian, and Serbo-Croatian. Although the Division responds only to the requirements of the U.S. Air Force, copies and reprints of formal publications are made available to the public through the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234, and the Defense Documentation Center, Cameron Station, Alexandria, Va., 22314, and are regularly announced in DDC's *Technical Abstract Bulletin* (TAB) and in OTS' *Technical Translations.*

Collections Maintenance and Preservation Office

Library of Congress
First Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 967–7445 (Area code: 202)

The Office makes studies concerning techniques of laminating documents; the binding of books; the preservation of maps, films, charts, books, manuscripts, and other library materials; the lighting of exhibit cases housing books and papers, including types of light filters to be used; the physical security of the Library's collections; and the space and equipment used to house these collections. Questions within this scope are answered, short lists of literature citations provided, and referral and consulting services furnished. On-site use of the literature collection maintained by the Office is permitted.

Division for the Blind

Library of Congress
First Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 967–7303 (Area code: 202)

The Division for the Blind plans and conducts a national program to bring free reading materials to the Nations' blind residents. These materials consist of publications in braille and in sound recordings, as well as suitable "playback" equipment for discs. Responsibilities for planning include selection of reading materials, their procurement and distribution through cooperating regional libraries; research on materials, devices, equipment, and systems for communication with the blind; design, development, and manufacture of "playback" equipment and its distribution through cooperating agencies for the blind; training, guidance, and coordination of volunteers who can in any way augment the Division's resources; and preparation of publications in printed form or in media for the blind to insure full use of the Division's program. A national collection of reading materials is maintained to supplement the services of the cooperating regional libraries and to offer direct service to local blind persons.

The Division prepares replies and compiles bibliographies in answer to specific questions concerning blindness or work with blind persons. Reference and bibliographic services on any subject, including many aspects of science and technology, are provided to legally blind persons. The Division also conducts a correspondence course on braille transcribing and answers technical questions on the braille system.

International Organizations Section

Library of Congress
First Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 783–0400 Extension 797, 8073, or 8074 (Area code: 202)

A part of the General Reference and Bibliography Division and supported by the National Science Foundation, the Section gathers and disseminates information on meetings of both governmental and non-governmental groups that are internationally organized, financed, or sponsored. Attention is also given to the history, structure, operation, financing, activities, and publications of all international multilateral organizations, and the organization, financing, and publications of international meetings, with special attention to future international meetings. Data from all available sources are collected and evaluated; material exploited is in all western European and some Slavic languages. Programs and other preconference documentation are gathered by the Section and may be consulted on site. Inquiries pertaining to international meetings will be answered as time permits.

The chief project of the Section is the publication of a two-part calendar, *World List of Future International Meetings.* Part I is devoted to science, technology, agriculture, and medicine; Part II lists meetings in the social, cultural, commercial, and humanistic fields. Issued quarterly with interim monthly supplements, the calendar may be obtained by subscription from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. *International Scientific Organizations,* a descriptive guide, may also be purchased from the Superintendent of Documents.

Map Division

Library of Congress
Second Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 967–7273 (Area code: 202)

A comprehensive collection of maps, charts, and atlases from all areas of the world is maintained by the

Map Division. Brief questions are answered free of charge; consulting, advisory, and referral services are provided. On-site use of the collections is permitted.

A list of publications relating to holdings may be obtained free on request from the Division.

National Referral Center for Science and Technology

Library of Congress
Second Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 967–8265 (Area code: 202)

Operating in the Library of Congress with the support of the National Science Foundation, the National Referral Center is designed to provide a single place to which scientists and engineers may turn for advice on where and how to obtain scientific or technical knowledge of any kind. The Center does not answer technical questions directly, nor does it furnish bibliographic assistance. It functions as an intermediary, directing those who need information to those who can provide it. To perform this function, the Center has established a detailed register of existing governmental, industrial, and academic information capabilities in all areas of science and technology, including the social sciences.

Referral service may be requested by any organization or individual working in any field of science and technology. There are no charges, and inquiries may be made by telephone, through personal visit, or by correspondence. No special form is required, but inquirers are encouraged to define their area of interest and the kind of information desired as specifically as possible.

The Center is also responsible for the preparation of directories listing information resources available in selected scientific or technical fields. Availability of these directories, as they are published, will be announced as widely as possible through the professional and technical press.

Science and Technology Division

Library of Congress
Second Street and Independence Avenue SE.
Washington, D.C. 20540
Telephone: 967–8043 (Area code: 202)

All reference activities relating to science and technology, with the exception of clinical medicine and technical agriculture, are administered and coordinated by the Division. Material in all languages in which scientific and technological literature is written is selected by the Division for all portions of the Library of Congress collections dealing with these disciplines It provides reference and other information services without charge, including brief answers to technical inquiries; brief literature searches; short lists of literature citations in response to specific inquiries; and consulting and advisory services. Photocopying of material is done for a fee.

In cooperation with the Office of Technical Services of the U.S. Department of Commerce, the Division also offers a comprehensive literature searching service utilizing the full resources of both OTS and the Library of Congress; an hourly fee is charged. All inquiries should be addressed to Head, Reference and Library Services Section, Science and Technology Division.

The Science Reading Room, operated by the Division, contains research collections in the basic sciences; abstracting journals; and a collection of technical dictionaries, encyclopedias, and handbooks. Since the Library of Congress is a Federal Regional Technical Report Center, unclassified reports from AEC, NASA, and DOD are made available here, as well as certain DDC reports. Reference service and guidance in the use of the facilities and in the location of hard-to-find material are provided. Photocopies of material are furnished for a fee. Interlibrary loans can be arranged through the Loan Division of the Library.

The Aerospace Medicine and Biology Bibliography Section within the Division is responsible for the compilation of bibliographies in areas that include exobiology, sensory and neurophysiology, physiological and psychological effects of environmental factors and stresses, psychology, psychiatry, personnel, medical aspects, pharmacology, toxicology, safety, survival, rescue, man-machine integration, and life support systems. The bibliographic task is divided into two major sections: *Abstracts from the Current Open Literature* and *Abstracts From the Retrospective Literature.*

Abstracts From the Open Current Literature is a comprehensive survey of the published literature, both domestic and foreign, on the above subjects Beginning July 1964 the abstracts will be published monthly as a NASA publication A selection of the current abstracts are published in the journal *Aerospace Medicine.*

Abstracts From the Restrospective Literature are designed to provide comprehensive coverage of the literature from 1952 to 1961. Six volumes have appeared to date and are published under the title, *Aerospace Medicine and Biology: An Annotated Bibliography.* Publication of the additional four volumes covering the years 1958–61 will be completed within about 2 years. Inquiries regarding procurement of these publications should be directed to NASA, Code AFSS–A, Washington, D.C., 20546.

Specialized bibliographic searches are also the responsibility of the Cold Regions Bibliography Section of the Science and Technology Division. Under the sponsorship of the U.S. Army and the National Science Foundation, the Section prepares bibliographies, indexes, and abstracts on cards relating to engineering and basic scientific research in cold regions. Included are materials, equipment, and behavior in low temperatures, as well as properties of snow, ice, and permafrost.

Requests for cards or bound volumes of the annual *CRREL Bibliography on Snow, Ice, and Permafrost* should be directed to the Cold Regions Research and Engineering Laboratory, U.S. Army, Hanover, N.H. Requests for cards or bound volumes of the *Antarctic Bibliography* should be addressed to the Office of Antarctic Programs, National Science Foundation, Washington, D.C., 20550.

The Radioisotope Bibliography Section of the Science and Technology Division, under agreement with the U.S. Atomic Energy Commission, selects and prepares abstracts from the foreign literature on radioisotopes in industry: coal, food, glass, mining, and ore processing, paint and varnish, paper, petroleum, plastics, polymers and rubber, shipping and transportation, sugar, textiles, and wood; also, activation analysis, gages, radiography, and leak detection. Extensive literature searches are conducted to extract material from foreign sources, including publications in Russian, Chinese, Japanese, Italian, Spanish, French, and German. Abstracts are available by annual subscription on a current basis in the form of 3 x 5 cards. Earlier abstracts have been compiled and published as *Radioisotopes in World Industry; Abstracts of Selected Foreign Literature,* which may be purchased from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234.

LICK OBSERVATORY, *See* UNIVERSITY OF CALIFORNIA

LILLY RESEARCH LABORATORIES

Scientific Library

Lilly Research Laboratories
Indianapolis, Ind. 46206
Telephone: 636–2211 (Area code: 317)

Library Agricultural Service

Agricultural Research Center
Lilly Research Laboratories
Greenfield, Ind. 46140
Telephone: 462–4441 (Area code: 317)

Two special libraries of books, journals, pamphlets and clippings, and patents have been organized by the Company to support its scientific and medical activities. The Scientific Library has collections in the fields of biology, medicine, plant science, animal nutrition, veterinary research, chemistry, and pharmaceutical science. Special collections include domestic and foreign drug encyclopedias, foreign pharmacopoeias, and 65,000 cards containing drug product information. Collections at the Library Agricultural Service stress the fields of agriculture, veterinary medicine, plant science, and toxicology. Foreign language publications at both libraries are in Spanish, French, German, and Japanese.

Materials at the two libraries are available for on-site use by approved visitors. Interlibrary loan services are available for professional persons. Packets of scientific information are provided to the general public upon request by the Public Relations Division at the Indianapolis address.

LINCOLN LABORATORY, *See* MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LITTON SYSTEMS, INC.

Applied Science Division Library

2295 Walnut Street
St. Paul, Minn. 55113
Telephone: 633–7110. Extension 205 (Area code: 612)

The Library, primarily for the use of Division personnel, consists of books, journals, documents and reports in the fields of electronics; physics, particularly solid state; space technology; particle technology; meteorology; and balloon systems and instruments.

Interlibrary loans may be arranged.

LOBOUND LABORATORY, *See* UNIVERSITY OF NOTRE DAME

LOGISTICS RESEARCH PROJECT, *See* GEORGE WASHINGTON UNIVERSITY

LONG-RANGE PLANNING SERVICE INFORMATION CENTER, *See* STANFORD RESEARCH INSTITUTE

LOS ANGELES COLLEGE OF OPTOMETRY

950 West Jefferson Boulevard
Los Angeles, Calif. 90007
Telephone: 747–9161 (Area code: 213)

The College maintains a special library on visual science; optometry; ophthalmology, except surgery; physiological, physical, and geometric optics; and ophthalmic optics. There is a special collection of the writings of Hermann Cohn, a 19th century German ophthalmologist.

On-site reference is permitted to researchers by advance arrangement. Material is available for loan to optometrists or any scientist working in the field of vision, subject only to priority requirements of the faculty and students of the College.

LOS ANGELES COUNTY AIR POLLUTION CONTROL DISTRICT

434 South San Pedro Street
Los Angeles, Calif. 90012
Telephone: 629–4711 (Area code: 213)

A local Government agency, the APCD compiles, analyzes, and generates data and reports on air pollution, source control, and air monitoring for the Los Angeles area. Data are available for on-site reference only. Most reports are free; a limited number are available at cost.

Publications obtainable free on request include the monthly *News Report,* the monthly *Report of Meteorology, Air Pollution Effects and Contaminant Maxima* (*Los Angeles County*), and the *Quarterly Contaminant Report.*

LOUISIANA STATE UNIVERSITY

Chemistry Library

Louisiana State University
Baton Rouge, La. 70803
Telephone: 348–6511 Extension 2530 (Area code: 504)

Books and journals on the fundamentals of the various branches of chemistry and chemical engineering comprise the Chemistry Library. Literature is acquired from sources in English, Russian, Italian, French, Spanish, German, and Swedish. The collection is available for on-site reference use, and loans are made.

Louisiana Agricultural Experiment Station

Louisiana State University
Post Office Box 8877
Baton Rouge, La. 70803
Telephone: 348–6511 (Area code: 504)

As the research division of the College of Agriculture, the Agricultural Experiment Station maintains a program of research directed toward the development of new basic information bearing on almost every phase of agriculture, including economic and sociological problems. Research is conducted in 16 departments on the main campus, at 10 branch stations, and at 4 other off-campus sites. Particular areas of investigation include agricultural chemistry, food technology, agronomy, entomology, feeds and fertilizers, forestry, horticulture, plant pathology, sugar cane, sweet potatoes, rice, animal science, dairy science, beef cattle, poultry science, veterinary science, agricultural engineering, rural sociology, agricultural economics, experimental statistics, and home economics.

The Station answers technical questions directly or refers inquirers to other organizations that may provide advice and guidance.

Publications are provided without charge to bona fide libraries anywhere. No more than five copies of one bulletin, or one copy of five different bulletins, will be sent free to out-of-State residents; additional copies will be sent at cost. *Louisiana Agriculture,* published quarterly, is issued free to residents of the State.

Main Library

Louisiana State University
Baton Rouge, La. 70803
Telephone: 348–6511 Extension 2217 (Area code: 504)

The collection covers all major subject areas, with particular emphasis on geology, petroleum geology, paleontology, botany and plant pathology, and sugar. There are books and journals in English, Russian, Italian, Spanish French, and German.

Reference and photocopying services are available to the public. Borrowing privileges are granted only to the University's students, staff, and faculty, and to professional, scientific, and academic personnel in the area.

Nuclear Science Center

Louisiana State University
Baton Rouge, La. 70803
Telephone: 348–6511 (Area code: 504)

This research and development laboratory offers to any agency on a cost recovery basis educational, research, and development programs related to the applications of nuclear technology. Services for educational purposes may be performed at no cost or minimum charges. Projects are evaluated individually. Requests for information on nuclear technology will be answered, if possible, by the staff or referred to the best known source.

School of Medicine

Louisiana State University
1542 Tulane Avenue
New Orleans, La. 70803
Telephone: 523–6692 (Area code: 504)

The School of Medicine maintains a library of books and journals on medicine and nursing and allied sciences. There is a special collection on yellow fever. Foreign publications are in French, German, and Spanish.

Circulation material is restricted to the medical community. Photocopy and microfilm services are available.

MACKAY SCHOOL OF MINES, *See* UNIVERSITY OF NEVADA

McLEAN PALEONTOLOGICAL LABORATORY

Post Office Box 916
Alexandria, Va. 22313
Telephone: 765–4978 (Area code: 703)

The Laboratory serves the paleontological, stratigraphic, and geological sciences in any phase where fossils, particularly Foraminifera and Ostracoda, are used. Services include republishing of out-of-print and significant texts, compilation of data, and research on the taxonomy, stratigraphy, ecology, and structural aspects of microfossils. The regular publications of the Laboratory are designed to provide essential data for use in oil exploration, in industrial and academic research, and in reference libraries of industrial and academic institutions interested in the subjects covered. Consulting services are available for a fee. The Laboratory's reference library is open for on-site use by anyone with a serious interest in paleontology or stratigraphy.

The *McLean Card Catalogue of American Foraminifera* and the *McLean Card Catalogue of Ostracoda* both furnish media for the identification of fossil species and faunal assemblages from Cretaceous and Tertiary formations. Ecological data on Ostracoda are available in the *H. S. Puri Card Catalogue of Recent Ostracoda.* Both text and illustrations of described species are included in these catalogs, which may be obtained by subscription. Available for purchase are *Manual of Micropaleontological Techniques; Manual of Micropaleontological Stratigraphy; Reports from McLean Paleontological Labroatory; Strata Data Bibliographic Reference File on Foraminifera Ostracoda; Strata Data* on punched cards, Block #1 consisting of Florida Miocene data and Block #2 of Virginia-Maryland Miocene data, obtainable separately; and the *Strata Data Code Book.* A hand file of the *Strata Data* cards is also for sale.

MAGNAVOX CO.

2131 Bueter Road
Fort Wayne, Ind. 46805
Telephone: 743–9721 (Area code: 219)

The Company maintains a library collection on military and commercial electronic research and development, including antisubmarine warfare, armament, communication, radar and missile guidance, power supplies, converters, switches, amplifiers, printed circuits, radios, television, phonographs, and underwater and medical instruments.

Reference service and loan privileges are available to employees and to U.S. Department of Defense personnel. For others, access to the material is subject to management approval.

Publications issued by the Company include reports, standards and specifications, and data handbooks.

MALLINCKRODT CHEMICAL WORKS

Library

3600 North Second Street
St. Louis, Mo. 63107
Telephone: 231–8980 (Area code: 314)

The collection consists of books, journals, and reports on chemistry and closely related subjects. Sources in English, French, and German are represented. Public use of material is limited to on-site reference by arrangement. Interlibrary loans are made.

Uranium Division

Post Office Box 472
Saint Charles, Mo. 63302
Telephone: 993–9400 (Area code: 314)

The Uranium Division has a collection of books and journals on chemistry and a specialized collection of reports on the chemistry of uranium and its compounds, and on uranium production technology issued by the U.S. Atomic Energy Commission and the Atomic Energy Commission of Great Britain.

Books and journals are available on interlibrary loan. AEC reports are available for reference and loan to Government agencies and their contractors and contractor employees certified by the AEC; reports prepared by the Division may be purchased from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234.

MANLABS, INC.

21 Erie Street
Cambridge, Mass. 02139
Telephone: 491–2900 (Area code: 617)

Manlabs, Inc. engages in materials research and development for both private companies and Government agencies. The scope includes metallography, light and electron microscopy, mechanical testing, electrochemistry, metal joining, growth of single crystals, semiconductor metallurgy, process metallurgy, and ultrahigh pressure.

Company prepared reports may be consulted free on the premises; those in stock are for sale. A fee is charged for consulting service.

MARGARET SANGER RESEARCH BUREAU

17 West 16th Street
New York, N.Y. 10011
Telephone: 929–6200 (Area code: 212)

The Bureau is a center for service, education, and research in family planning and human fertility. It offers advice and treatment in contraception, infertility, and problems of marriage and family living. Contraceptive products are evaluated by the Bureau's Fertility Research Laboratory, which is the official testing center for Planned Parenthood—World Population. The MSRB library has a collection of books on birth control and contraceptive techniques; fertility and sterility; the development of planned parenthood and marriage education; and the medical, psychological, and social aspects of marriage.

Diagnostic services are provided by staff physicians. Technical consultant services are available to manufacturers of contraceptives. Laboratory and clinical study reports are restricted to research sponsors. The library is open for reference to medical students, research workers, and writers; no literature searches are performed.

A list of reports and pamphlets issued or distributed by the Bureau is available free on request.

MARINE BIOLOGICAL LABORATORY

MBL Street
Woods Hole, Mass.
Telephone: 548–3705 (Area code: 617)

The library of the Laboratory maintains a collection of books, journals, and reports on marine sciences and allied engineering and serves as repository for the library collections of the Woods Hole Oceanographic Institution. Material is in English, Russian, Italian, Spanish, French, and German.

Reference service is available to the Marine Biological Laboratory as well as to all scientific workers at the several Woods Hole institutions, including the Woods Hole Oceanographic Institution, the laboratory of the U.S. Bureau of Fisheries, and the workshop of the National Academy of Sciences.

MARINE CHEMURGICS, INC.

Post Office Drawer 951
Morehead City, N.C. 28557
Telephone: Swansboro 326–8307

This consulting laboratory conducts research and maintains a literature and data collection on improved and new uses for protein and lipid-bearing raw materials of marine origin. Areas investigated include human, animal, and poultry nutrition; reduction processes and new equipment; fats and oils chemistry; proteins; frozen foods; fish oils; rendering methods; and deodorizers. Holdings consist of books, journals, reports, patents, data, and nonprinted material.

Consulting services are provided and research information exchanged with nonprofit organizations on a cooperative basis. Most releases of information, however, are for a fee, based upon the client's requirement. Research findings are disseminated as technical reports.

MARITIME ADMINISTRATION, *See* U.S. DEPARTMENT OF COMMERCE

MARLIN-ROCKWELL, CORP.

Falconer Research Facility
402 Chandler Street
Jamestown, N.Y. 14701
Telephone: 524–0141 (Area code: 716)

The Corporation maintains a literature collection and disseminates information on bearings, particularly antifriction bearings, metallurgy, lubrication, dynamics, and mechanics. Technical questions are answered and literature searches made for customers, potential customers, and researchers.

MASSACHUSETTS HORTICULTURAL SOCIETY

300 Massachusetts Avenue
Boston, Mass. 02115
Telephone: 536–1720 (Area code: 617)

The Society maintains a library of books, journals, reports, and trade catalogs on horiculture and landscaping. Some material on botany is included. The library reading room is open to the public; however, books are loaned only to members of the Society. Free consulting and reference services are available by mail and telephone.

The monthly *Horticulture Magazine* and the annual *Yearbook* are free to members and available to others by subscription. The *Plant Buyers' Guide* is also published by the Society.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Aeronautics and Astronautics Library

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 Extension 5665. (Area code: 617)

The Library's holdings provide coverage in aerodynamics; aircraft; astrophysics, including some astronomy; auxiliary systems; facilities, research, and support; fluid and gas dynamics; heat transfer and thermodynamics; instrumentation; navigation and guidance; theoretical analysis of orbits and trajectories; propellants and combustion; propulsion; space vehicles; stresses and loads; and structural design. Publications are in all major languages.

Access to the collection is given to the MIT community and for a fee to others.

Arthur Rotch Memorial Library of Architecture and Planning

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

In addition to literature on architecture and city and regional planning, the Library has special collections of 26,000 slides and 15,000 color slides, among them slides of the Carnegie Study of the Arts of the United States. Holdings also include 1,500 maps and 15,000 mounted photographs.

Material is available on loan to the MIT community, to nonprofit organizations on interlibrary loan, and to profit organizations on interlibrary loan for a fee.

Cambridge Electron Accelerator Library

MIT
42 Oxford Street
Cambridge, Mass. 02139
Telephone: 868–7600 Extension 2630

Small and informal, the Library is concerned with the operation of the 6 Bev Cambridge Electron Accelerator and is under joint MIT-Harvard direction. The books, journals, and reports in the collection cover the design, construction, and use of very-high-energy accelerators. Publications in all major languages are included.

The Library serves MIT and Harvard staff and faculty and others making use of the Cambridge Electron Accelerator. A photocopying service is available.

Computation Center

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 Extension 4102 (Area code: 617)

The Center's data processing facility is available for training purposes and for assisting in basic research projects. The computer has been used on problems in economics, artificial intelligence, computer time-sharing, language translation, aerodynamics, operations research, meteorology, plasma research, and nuclear theory.

A semiannual progress report is free on request.

Department of Civil Engineering

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

The Department prepares reports on civil engineering, hydromechanics, water resources, materials, structures, soils, transportation, and systems engineering. Some reports are available at the cost of handling and mailing.

Department of Geology and Geophysics

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

Research under Government contracts conducted by the Department includes oceanographic research; meteorites; isotopic abundances of strontium, calcium, and argon; and time-series techniques (VELA Uniform). Technical progress reports and annual reports are available to Government agencies.

Department of Nutrition and Food Science

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

The Department conducts Government-sponsored research on nutrition; food science and technology, toxicology and animal pathology, and biochemical engineering. Some reports are available only to the sponsors; others are issued as reprints of articles published in scientific journals and are available on request.

Engineering Library

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 Extension 5661 (Area code: 617)

All aspects of civil engineering, electrical engineering, mechanical engineering, and naval architecture are covered by the collection, as well as materials sciences, including solid state physics and metallurgy. Reference service is available to MIT students, staff, and faculty, and to participants in the Membership Plan for Industry.

Fluid Mechanics Laboratory

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 Extension 2295 (Area code: 617)

Essentially a research organization in which graduate students play a major role, the Laboratory undertakes investigations in fluid mechanics, magnetohydrodynamics, plasma dynamics, kinetic theory of gases, and combustion. The *Fluid Mechanics Laboratory Reports* are available at no cost. Approximately 10 *Reports* are issued per year.

Fuels Research Laboratory

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 Extension 2943 (Area code: 617)

Facilities for research on a wide range of problems, from small-scale studies of fuel processing or combustion kinetics to research in high-output combustion in rockets, ramjets, and gas turbines are provided in the Laboratory. Books and reports in the field are available for on-site reference. Research results are published in MIT theses, journal articles, and reports for sponsoring Government agencies.

Hydrodynamics Laboratory

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

A major unit for experimental research in fluid mechanics, the Laboratory maintains a literature collection in all major languages on hydraulics, hydraulic engineering, hydrology, water resources, hydraulic machinery, coastal engineering, oceanographic, and sedimentation. Material is available for on-site reference to the MIT community, other universities, and governmental and private research agencies.

Instrumentation Laboratory

MIT
68 Albany Street
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

The Laboratory is engaged in Government-sponsored research and development in aerospace guidance and control systems. Reports are available to qualified recipients, in accordance with Department of Defense instructions. Special arrangements are necessary for access to the document collection.

Joint Highway Research Project

MIT, Room 1–178
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

Sponsored by Federal and State Government agencies, the Project conducts research in civil engineering, transportation planning, transportation engineering and research, traffic engineering and research, and transportation systems analysis; electronic computer techniques and systems related to these fields; and highway and airport pavement materials. Findings are published in technical reports, available at a nominal charge.

Laboratory for Nuclear Science Research Reading Room

MIT, Building 26–402
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 Extension 4238 (Area code: 617)

The collection consists of books, journals, reports, reprints, and data on nuclear physics and chemistry. Foreign source materials are in Russian, Italian, French, German, and Japanese. Holdings are available for on-site reference.

Lincoln Laboratory

MIT
Post Office Box 73
Lexington, Mass. 02173
Telephone: 862–5500 (Area code: 617)

A Government-sponsored research center, the Laboratory pursues research and development in advanced electronics which particular attention to national defense and space objectives. *Quarterly Progress Reports* are available to Department of Defense contractors and military agencies. The several series cover data systems, radio physics, radar, space communications, engineering, and solid state physics.

Lindgren Library

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

An earth science library serving the Department of Geology and Geophysics and the Department of Meteorology, the Lindgren Library supports MIT's Center for the Earth Sciences and consists of more than 12,000 volumes concerning geochemistry, geology, geophysics, meteorology and oceanography.

On-site reference is permitted. Interlibrary loan and photocopying services are available.

Materials Research Laboratory

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 (Area code: 617)

The mission of the Laboratory is research on materials for structural applications. Included are concrete and cementitious compounds, metallic reinforcements, natural and synthetic polymers, glasses, asphalt and bituminous materials, wood, and various composites containing combinations of these. Research reports prepared by the Laboratory are available on request.

Neurosciences Research Information Center

MIT
280 Newton Street
Brookline, Mass.
Telephone: 522–6700 (Area code: 617)

The Information Center specializes in molecular neurology, including the related areas of neurochemistry, molecular biology, molecular biophysics, biochemistry, chemical physics, biomathematics, solid state physics, neurobiology, chemical medicine, psychiatry, psychology, psychopharmacology, psychoacoustics, neurophysiology, electrophysiology, neurology, electron microscopy, information theory, thermodynamics, and neuroanatomy. Publications are in all major languages.

Literature searches, reference work, translations, and bibliographies are done primarily for member associates; however, standard materials may be borrowed through interlibrary loan.

Science Library

MIT, Room 14–S139
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864–6900 Extension 5685 (Area code: 617)

Serving the Departments of Biology, Chemical Engineering; Chemistry, Mathematics, Metallurgy, Meteorology, Nuclear Engineering, Nutrition, Food Science and Technology; and Physics, the Library acquires books, reports, and technical journals in all major languages. The Library also contains the Derr collection of early works in mathematics and physics; the Eastman collection of books on microscopy; the Gaffield collection of materials on glass manufacture; and the Kayser collection of pamphlets on spectroscopy.

On-site use and reference services are provided to the MIT community and for a fee to others. Interlibrary loan and photocopying services are available.

Soil Mechanics Library

MIT, Room 1-343
Civil Engineering Department
Cambridge, Mass. 02139
Telephone: 864-6900 Extension 145 (Area code: 617)

The Library collection covers soil mechanics, soil engineering, engineering geology, and soil science. Material consists of books, journals, reports, and data, and includes publications in Russian, Spanish, French, and German. On-site reference is permitted.

Weather Radar Research Project

MIT
77 Massachusetts Avenue
Cambridge, Mass. 02139
Telephone: 864-6900 (Area code: 617)

Sponsored by the U.S. Government, the Project maintains records of storm observations, consisting of radar observations of precipitation in the vicinity of Cambridge, Mass. Data include still and time lapse photographs of PPI and RHI displays and, since 1959, iso-echo contours. The records date back to November 1947. Material is available for loan by special request.

MATERIALS ADVISORY BOARD, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

MEAD JOHNSON & CO.

2404 Pennsylvania Avenue
Evansville, Ind. 47712
Telephone: 424-6441 Extension 809. (Area code: 812)

The Company maintains a library to support its pharmaceutical and manufacturing operations. The collection of books, journals, reports, and patents covers nutrition, pharmacology, toxicology, medicine, pharmaceutical and medicinal chemistry, synthetic organic chemistry, data processing, biochemistry, psychopharmacology, microbiology, cardiology, gastroenterology, and pediatrics. Languages represented are English, French, and German.

The library is generally unavailable to the public. Use of facilities by nonemployees is determined by careful evaluation of each request.

MEALS FOR MILLIONS FOUNDATION

215 West Seventh Street
Los Angeles, Calif. 90014
Telephone: 627-2545 (Area code: 213)

A nonprofit organization, the Foundation disseminates information on its multipurpose food, developed by the California Institute of Technology to combat malnutrition, as an example of how such foods can be developed from oilseed meals and other materials not now used for human food. The Foundation does not engage in research, but distributes multipurpose food to demonstrate to underdeveloped countries how their own unused materials can be utilized to correct diet deficiencies.

A secondary source of information about new foods and technology for processing human foods from unused materials, the Foundation collects experience reports on the use of multipurpose food by various hospitals, schools, leprosariums, and sanitariums. There are no restrictions on the use of the files or materials by serious inquirers. Referral, reference, and consulting services are available without charge. Pamphlets are available on request.

MECHANICAL PROPERTIES DATA CENTER, *See* BELFOUR ENGINEERING COMPANY

MEDICAL AND CHIRURGICAL FACULTY OF THE STATE OF MARYLAND

1211 Cathedral Street
Baltimore, Md. 21201
Telephone: 539-0872 (Area code: 301)

The library of the Medical and Chirurgical Faculty of the State of Maryland has a collection of more than 80,000 books and journals covering all aspects of medicine, including early editions on Maryland medical history.

The facilities are open to the public; bibliographic assistance is provided on a private basis for a fee. Only members have loan privileges, but others may obtain courtesy privileges through a full member. The library also furnishes interlibrary loan service.

MEDICAL CHEMICALS CORP.

4122-26 West Grand Avenue
Chicago, Ill. 60651
Telephone: 342-6450 (Area code: 312)

A manufacturer of medical chemicals, the Corporation provides information on sterile products and certain organic chemicals, including vitamins, anesthetics, hormones, and veterinary products. Current research includes studies of hair-biology problems. Consulting services regarding processes developed by the Corporation are available.

Technical reports and catalogs are provided without charge.

MEDICAL ILLUSTRATION SERVICE, *See* U.S. VETERANS ADMINISTRATION

MELLON INSTITUTE

4400 Fifth Avenue
Pittsburgh, Pa. 15213
Telephone: 621–1100 Extension 369 (Area code: 412)

A nonprofit foundation, the Mellon Institute maintains a library which specializes in chemistry, including biochemistry and radiation chemistry, metallurgy, industrial hygiene, chemical hygiene and toxicology, metal physics, spectroscopy, polymer science, and air and water pollution. Foreign publications are in Russian, Italian, Spanish, French, and German.

The collection is open to members of the scientific community for on-site reference only. Interlibrary loans are made and photocopies are provided of material not easily available elsewhere. Because of staff limitations, the library cannot undertake literature surveys or extensive reference projects for groups outside the organization.

MELPAR, INC.

Technical Information Center

3000 Arlington Boulevard
Falls Church, Va. 22042
Telephone: 534–6000 Extension 2374 (Area code: 703)

An information resource in applied research, the Technical Information Center has a collection of books, journals, and reports in the areas of physics, electronics, chemistry, meteorology, and the life sciences, including medicine and psychology. Specialized interests cover chemical warfare, biological fuel cells, communications, man-in-space, thin films, gaseous lasers, electronic properties of materials, seismology, speech compression; and pattern recognition. Material is collected in English, Russian, Italian, Spanish, French, and German.

The Center provides reference and literature search services and compiles bibliographies. Direct loan privileges are available to Company personnel and to personnel of the Westinghouse Air Brake Co. The extent of services to others is determined on an individual basis. Accession lists are issued.

METAL POWDER INDUSTRIES FEDERATION—AMERICAN POWDER METALLURGY INSTITUTE

60 East 42d Street
New York, N.Y. 10017
Telephone: 682–7888 (Area code: 212)

Functioning as the headquarters of technical and trade associations, the Institute maintains a library and information center on powder metallurgy processes, products, and equipment; metal powders; magnetic cores, including iron powders and ferrites; chemical and pyrotechnic powders and metallic-paint pigments; and oil-impregnated bearings. In addition to books, journals, and reports, holdings include standards, slides, and photographs acquired from sources in English, Russian, Italian, Spanish, French, and German.

The facilities are open to the public for on-site use. Reference and consulting services are provided free; special literature searches are performed for a fee. Photocopying is done at cost.

Subscriptions may be obtained to the monthly *Information Bulletin,* which contains an abstracts section of world literature in the field. Copies of *Progress in Powder Metallurgy,* issued annually, are for sale. The *Powder Metallurgy Quarterly* is available free on request.

METCUT RESEARCH MACHINING INFORMATION CENTER

3980 Rosslyn Drive
Cincinnati, Ohio 45209
Telephone: 271–5100 (Area Code: 513)

Affiliated with Metcut Research Associates, Inc., the Center has been set up to gather, correlate, develop, and disseminate machining information on metals, alloys, and nonmetallic materials, such as plastics, ceramics, composites, and graphite, and to provide machining data, recommendations, or other suitable assistance for the solution of specific machining problems. Machining data cover all types of metal removing processes; grinding; abrasive machining; chem-milling; and electrolytic, electrical discharge, ultrasonic, and electron beam machining. Existing machining data are continually being gathered from the literature as well as from industry and is acquired from sources in English, Russian, Italian, Spanish, French, and German.

Consulting, reference, and document services are available for a fee. No proprietary information generated within the Company's testing laboratories is disseminated without formal approval of the firm sponsoring the work.

The *Ordnance Corps Machining Data Pamphlet* and the *U.S. Air Force Machinability Reports* may be purchased.

MIAMI UNIVERSITY

Aeronautics Museum

Miami University
Culler Hall
Oxford, Ohio 45056
Telephone: 523–2161 Extension 426 (Area code: 513)

Operated by the Department of Aeronautics, the Museum has a collection of Wright Brothers memorabilia, lift and drag indicating instruments, airfoil models, and historic wind tunnels. The materials are available for on-site reference.

Army Map Service Depository

Miami University
Irvin Hall and University Library
Oxford, Ohio 45056
Telephone: 523–2161 Extension 587 (Area code: 513)

The collection consists of all maps prepared by the U.S. Army Map Service and maps of the State of Ohio. It is open to the public for on-site use. Reference and document services are available.

Geology Museum and Map Library

Miami University
Brice Hall
Oxford, Ohio 45056
Telephone: 523–2161 Extension 328 (Area code: 513)

The Museum contains fossils, including a number of type specimens, particularly of the Upper Ordovician fauna of southwestern Ohio, southeastern Indiana, and northern Kentucky; a systematic mineral collection; and meteorites from dated falls. The Map Library has general geographic location maps as well as topographic, geologic, and hydrographic maps and charts.

Material is available to the public for on-site reference. Consulting and document services are provided.

Herbarium

Miami University
Upham Hall
Oxford, Ohio 45056
Telephone: 523–2161 Extension 259 (Area code: 513)

Plant specimens in the Herbarium range from algae to angiosperms, with special emphasis on American lichens, American and tropical Pacific Bryophyta and vascular plants from southwestern Ohio. Specimens are exchanged with other institutions on a worldwide basis. Materials are available for loan or on-site use without fee to researchers. Library facilities and necessary equipment are available for visiting investigators without charge.

Museum of Anthropology

Miami University
Harrison Hall
Oxford, Ohio 45056
Telephone: 523–2161 Extension 697 (Area code: 513)

The Museum maintains archeological and ethnological collections, with emphasis on artifacts from the United States, Middle and South America, and Java. Exhibits are open to professional personnel and students of archeology and anthropology. Reference services are available.

University Libraries

Miami University
Oxford, Ohio 45056
Telephone: 523–2161 Extension 590 (Area code: 513)

The main library has holdings in the general arts and sciences, with emphasis on literature and American history. It is a depository for U.S. Government publications. Departmental libraries are maintained in architecture and sciences. Material is collected in English and to a limited extent in Russian, Italian, Spanish, French, and German.

Reference and document services are provided to Miami faculty and students, to faculty and authorized graduate students of other universities, to authorized private and Government research agencies, and to the Oxford community.

Weather Information Center

Miami University
Culler Hall
Oxford, Ohio 45056
Telephone: 523–2161 Extension 426 (Area code: 513)

Associated with the Department of Aeronautics, the Weather Information Center collects weather data for Oxford, Ohio, including records of pressure, wind velocity, air temperature, and precipitation. Technical questions are answered and reference services are available.

Zoology Museum

Miami University
Upham Hall
Oxford, Ohio 45056
Telephone: 523–2161 Extension 261 (Area code: 513)

The Zoology Museum exhibits include typical animals from each class of the animal Phyla; collections of marine, freshwater, and land snails; mounted birds and mammals; and studies in comparative osteology and embryology. The Museum is open to visitors. Loans of exhibit materials are made to schools.

MICHIGAN MEMORIAL-PHOENIX PROJECT, *See* UNIVERSITY OF MICHIGAN

MICHIGAN STATE UNIVERSITY

Agricultural Experiment Station

101 Agricultural Hall
East Lansing, Mich. 48823
Telephone: 355–0123 (Area code: 517)

Research in agriculture is carried out on the campus at East Lansing and at 12 field centers throughout the State. It is supported by a literature collection on agriculture; home economics; storing; processing, handling, and distribution of farm products; agricultural economics; food technology; plant and crop breeding; plant diseases; weed control; insect control; crop production; soil management; forestry; animal husbandry; poultry; dairy products; veterinary science; and fish and wildlife. Material may be used on the premises. Reference service is furnished and technical inquiries answered.

The following publications are issued by the Station: *The Quarterly Bulletin,* published four times per year and containing technical articles intended for research members; *Research Bulletins,* covering extensive work on a particular subject for which a permanent record is needed and intended mainly for other researchers; and *Research Reports,* designed for farmers, homeowners, and persons connected with Agribusiness.

MICHIGAN TECHNOLOGICAL UNIVERSITY

Ford Forestry Center

Michigan Technological University
L'Anse, Mich. 49946
Telephone: 524–3236 (Area code: 906)

The Ford Forestry Center, consisting of a field station, sawmill, and research facilities, conducts studies in forest soils, forest management and inventory, phytosociology, and the primary processing of felled wood products. It is concerned with the northern forest types, especially northern hardwoods, and conducts short courses for professional foresters and industrial personnel on specialized techniques, such as sawmill operation, lumber grading, and aerial interpretation. The Center provides technical consultant services, maintains a report and data collection that is available for direct use by interested visitors, and answers specific technical questions without charge. There is a fee for use of the sawmill. *Ford Forestry Center Bulletins* are issued irregularly free of charge.

Institute of Mineral Research

Michigan Technological University
Houghton, Mich. 49931
Telephone: 482–1600 Extension 305 (Area code: 906)

The Institute is engaged in basic and applied research projects sponsored by mining and industrial companies. Facilities include a pilot plant and ore dressing laboratories. A collection of reports and data is maintained in the areas of extractive and process metallurgy, geophysics, mineral beneficiation, mineralogy, mining methods and systems, iron and copper resources of Michigan's upper peninsula, and nonmetallic mineral resources. All major European languages are represented.

Fees are charged for literature searches and analyses. Results of contract research are confidential and available only to the sponsor. The Institute issues a *Quarterly Progress Report.*

Institute of Wood Research

Michigan Technological University
Houghton, Mich. 49931
Telephone: 482–1600 (Area code: 906)

The Institute provides research and information support to a long-range program for the industrial development of Michigan's forest resources. It investigates methods for the industrial utilization of timber, especially the hardwood forest region of northern Michigan, and acts as a clearinghouse for information on wood technology, chemical wood processing, timber harvesting, mechanical engineering of wood processing equipment, and economics of production. Holdings consist primarily of reports, but include journals, books, data, and nonprinted material.

Staff-time priority is given to Michigan industries, which may obtain consulting services free; however, major projects are conducted on a contract basis. Only limited services are provided in response to out-of-state requests. The literature collection is accessible for on-site use. Literature searching, bibliographic reference, or loan services are not available. Research findings are disseminated in the form of technical reports.

Library

Michigan Technological University
Houghton, Mich. 49931
Telephone: 482–1600 Extension 203 (Area code: 906)

The Michigan Technological University Library has holdings relating to biological sciences, business and economics, chemistry, forestry, geology, mathematics, metallurgy, mining, physics, all phases of engineering, and history of science. Books, journals, reports, and films are collected. Subscriptions to some 1,500 serials and periodicals are maintained, all at the disposal of research scholars. Foreign literature includes material in Chinese, Russian, Italian, Japanese, Spanish, French, German, and Finnish.

The Library is open to the public; document and interlibrary loan services are available. A list of acquisitions, issued irregularly, is provided on an exchange basis.

MIDWEST INTER-LIBRARY CENTER

5721 Cottage Grove Avenue
Chicago, Ill. 60637
Telephone: 684–4545 (Area code: 312)

An association of 21 university and research libraries, the Center serves member libraries as a depository for rarely used research books, periodicals, and newspapers and as buyer of research literature for cooperative use. Holdings comprise books, journals, microfilm, and newspapers in all areas of science and technology. Special collections include foreign doctoral dissertations, foreign bank publications, documents of the Academy of Sciences of the U.S.S.R., Chinese mainland publications, IGY meteorological records, literature on railroading, and older medical publications. An effort is made to collect all journals abstracted in *Chemical Abstracts* and *Biological Abstracts* that are not received by other libraries. Material is collected in all major languages.

Loans are made only to libraries, not to individuals, but photocopies may be purchased. Any library, whether a member or not, may borrow on interlibrary loan without fee or restriction except payment of postage. Holdings are available for on-site use.

MIDWEST RESEARCH INSTITUTE

425 Volker Boulevard
Kansas City, Mo. 64110
Telephone: 561–0202 (Area code: 816)

ASTRA (Applied Space Technology—Regional Advancement)

Sponsored by the National Aeronautics and Space Administration, ASTRA is an information service conducted by the Midwest Research Institute on an experimental basis. It is designed to acquaint universities with NASA's research needs and interests and to supply industry with technical information from NASA programs which may have potential commercial applications. Information is gained from an analysis of NASA documents and patents and personal contacts with NASA personnel. The project is restricted to seven midwestern States. Reports are made quarterly to NASA's Office of Technology Utilization.

Germanium Information Center

Serving producers and commercial users of germanium as a primary resource for information, the Center maintains a collection of books, journals, reports, patents, and data on germanium as related to metallurgy, chemistry, medicine, and electronics. Foreign literature is collected in Chinese, Russian, Japanese, Italian, Spanish, German and French. Market data and economic information are evaluated to develop reliable techniques for predicting future trends and markets.

The Center provides answers to technical questions, compiles bibliographies, and furnishes data compilations on request. State-of-the-art reviews are prepared for sponsors only. Reference and document services are available to anyone; there are restrictions on proprietary information. Proposals in basic research are encouraged, and the Center will furnish to qualified organizations limited quantities of germanium metal, oxide, or other organogermanium compounds. A semiannual newsletter on germanium is available without charge.

Thermophysical Properties of Thermal Insulating Materials

Sponsored by the U.S. Air Force, a data handbook on the thermophysical properties of thermal insulating materials has been prepared (ASD–TDR–62–215) and updated once (ML–TDR–64–5). The handbook has been prepared by collection of data from the literature and, when not available in the literature, directly from manufacturers and users. Currently, the Air Force plans to continue updating the handbook at appropriate intervals.

MILES LABORATORIES, INC.

1127 Myrtle Street
Elkhart, Ind. 46518
Telephone: 264–3111 (Area code: 219)

The company maintains a library of books, journals, and patents on chemistry, medical sciences, pharmacy, chemical technology, pharmaceutical manufacture and trade, engineering, and business administration. Sources are in English, Italian, Spanish, French, German, and Japanese. Materials are available to the public for on-site use. Limited outside loans are made.

MINERALOGICAL SOCIETY OF AMERICA

U.S. National Museum
Smithsonian Institution
Washington, D.C. 20560
Telephone: 628–1810 Extention 5271 (Area code: 202)

The Society provides free referral service in response to requests for information on mineralogy, petrology, and crystallography.

Publications issued by the Society which may be obtained by subscription are the bimonthly *American Mineralogist* and *Mineralogical Abstracts*. The latter is compiled quarterly from literature in English, German, French, Spanish, Italian, and Russian, and published jointly with the Mineralogical Society of Great Britain.

MINNEAPOLIS METALLURGY RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

MINNESOTA MINING & MANUFACTURING CO.

Abrasives Library

Building 2–3
900 Bush Avenue
St. Paul, Minn. 55101
Telephone: 733–5236 (Area code: 612)

Established to provide reference support for research in abrasives, the Library collects books, journals, reports, patents, and data on all aspects of coated abrasives, including backing materials, adhesives, polyers, and minerals. Holdings also include basic organic, inorganic, and physical chemistry journals. On-site reference is available only to Company employees; however, interlibrary loans and photoduplication services are provided.

Graphic Products Library

Minnesota Mining & Manufacturing Co.
Building 209-2C
444 McKnight Road
St. Paul, Minn. 55119
Telephone: 733–2592 (Area code: 612)

In support of research in graphic products, the Library has a collection of books, journals, pamphlets, and microfilm in specialized areas of chemistry, physics, photography, printing, and duplicating. The Library is not available to the public; however, some material may be borrowed on interlibrary loan.

3M Technical Library

Minnesota Mining & Manufacturing Co.
2301 Hudson Road
St. Paul, Minn. 55101
Telephone: 733–2447 (Area code: 612)

The main library of the Company, the 3M Technical Library has a literature collection in the pure sciences, including chemistry, physics, mathematics, and biology; applied sciences; and engineering. Books, journals, reports, patents, and nonprinted material are collected. Loan privileges and photoduplication services are available.

MINNEAPOLIS MINING RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

MISSISSIPPI STATE MEDICAL ASSOCIATION

725 Riverside Drive
Jackson, Miss. 39202
Telephone: 353–6358 (Area code: 601)

A statewide professional society, the Association maintains an archives and information service and publishes a monthly journal. Books, journals, reports, and papers are collected on the medical sciences and compilations are made of socioeconomic data. The use of reference sources is generally restricted to physician-members, but requests from nonprofessional individuals and agencies for information and data are answered.

Available for purchase are the *Journal of the Mississippi State Medical Association* and the *Monthly Directory Supplement*, both issued monthly and sold on a yearly subscription; and the *Directory of the Mississippi State Medical Association*, an annual publication. The Association also publishes special socioeconomic studies relating to medical care; conference proceedings; indexes; and bibliographies.

MOBIL CHEMICAL CO.

Edison Township Laboratory

State Highway 27
Metuchen, N.J. 08840
Telephone: 287–0500 (Area code: 201)

The Laboratory has a literature collection of books, journals, and reports in addition to data and patent collections in the fields of petrochemicals and derivatives, polymers, and agricultural chemicals. All major European languages are represented.

On-site use of the collection is limited to affiliated Socony Mobil Co. personnel. However, interlibrary loans can be arranged through non-Company libraries in New York and New Jersey. Reference questions from such libraries are answered if not requiring more than 2 hours of reference work.

MORGANTOWN COAL RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

MORRIS ARBORETUM, *See* UNIVERSITY OF PENNSYLVANIA

MOSSBAUER EFFECT DATA GROUP, *See* NORTH AMERICAN AVIATION, INC.

MOUNT DESERT ISLAND BIOLOGICAL LABORATORY

Salisbury Cove, Maine 04672
Telephone: 288–3934 (Area code: 207)

A nonprofit research institution, the Laboratory furnishes, on a fee basis, research facilities and logistic support for scientists from various institutions to conduct their own investigations. Priority for research space is given to studies for which the local cold water fauna and flora is particularly suited. Research activities are limited to the summer months and are centered in three areas: renal physiology, developmental biology, and fauna of the North Atlantic. The Laboratory collects data and reports and has compiled a partial checklist of local fauna. All information resources must be used on location. Reference and consulting services are available.

The *Bulletin of the Mount Desert Island Biological Laboratory*, published every 3 years, contains general information about the Laboratory, lists of personnel engaged in research, and short abstracts of their projects.

MOUNT WILSON AND PALOMAR OBSERVATORIES, *See* CARNEGIE INSTITUTION OF WASHINGTON

MUELLER BRASS CO.

1925 Lapeer Avenue
Port Huron, Mich. 48060
Telephone: 985–5111 (Area code: 313)

The Company has a library on copper, brass, aluminum, forgings, extrusions, castings, powder metal, metalworking, dies, metallurgy, refrigeration, plumbing, heating, and air-conditioning. Material is in English, Russian, and German.

Except for restricted Company reports, information is available on loan or for on-site reference to local industrial community libraries, public libraries, and trade associations.

MUSEUM OF HISTORY AND TECHNOLOGY, *See* SMITHSONIAN INSTITUTION

MUSEUM OF NATURAL HISTORY, *See* SMITHSONIAN INSTITUTION

MUSEUM OF NORTHERN ARIZONA

Fort Valley Road
Post Office Box 1389
Flagstaff, Ariz. 86002
Telephone: 774–2433 (Area code: 602)

Sponsored by the Northern Arizona Society of Science and Arts, Inc., the Museum provides facilities for studies related to the natural history of the Southwest, particularly the biology, anthropology, ethnology, geology and archeology of northern Arizona and the Colorado Plateau. The Museum offers exhibits of artifacts, rocks, fossils, animals, and plants and has a collection of books, journals, reports, photos, maps, and slides. A repository for well samples is also maintained in cooperation with the Arizona Land Department and the U.S. Geological Survey.

Laboratory space is available to visiting scientists. Admission to the Museum's exhibits is free. The library collections are accessible to anyone for on-site use, and reference and loan services are provided.

Publications issued by the Museum include ***Plateau,*** a quarterly journal containing short papers on original research projects available on subscription; technical reports on field laboratory techniques; monographs; and reprints. All publications are for sale; a list is obtainable free on request.

NALCO CHEMICAL CO.

6216 West 66th Place
Chicago, Ill. 60638
Telephone: 458–0720 (Area code: 312)

The Company has a library of books, journals, reports, patents, films, and photos relating to corrosion inhibitors, antifoams, ion exchange, paper, coagulation, oil additives, microbiocides, and weed control. A special collection pertains to industrial water treatment. Reference, translating, and document services are essentially limited to staff members, but some material is available on interlibrary loan.

NARRAGANSETT MARINE LABORATORY, *See* UNIVERSITY OF RHODE ISLAND

THE NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

The National Academy of Sciences-National Research Council is a private, nonprofit organization dedicated to the furtherance of science and its use for the general welfare. Each year, the Academy elects up to 35 American scientists and engineers to its membership, selected for their outstanding contributions to knowledge. Its members now number over 675. Under the terms of its Congressional charter, the Academy is called upon to act as an official, yet independent, adviser to the Federal Government in any matter of science or technology. This provision accounts for the close ties that have always existed between the Academy and the Government, although the Academy is not a Federal agency.

The National Research Council was organized by the Academy at the request of President Wilson to enable the broad community of U.S. scientists and engineers to associate their efforts with the limited membership of the Academy in service to science and the Nation. Its members, who receive their appointments from the president of the Academy, are drawn from academic, industrial, and governmental organizations throughout the country. In addition, several thousand scientists and engineers take part in the activities of the Research Council through membership on its boards and committees.

Most of the activities of NAS–NRC are organized into subject-matter areas within the eight divisions of the over-all Academy Research Council: behavioral sciences, biology and agriculture, chemistry and chemical technology, earth science, engineering and industrial research, mathematics, medical sciences, and physical sciences. Other groups, which deal with matters affecting all the natural sciences, are established by the Academy when the need arises. Such groups include the Office of Documentation, Office of the Foreign Secretary, and Office of Scientific Personnel, as well as a number of special boards and committees.

As a general, although not strict, rule the committees of NAS–NRC do not conduct research directly. They determine what is reliably known, what is probable, and what is surmised concerning the problem at hand, indicating additional lines of research most needed. These studies usually result in a report published by NAS–NRC. In many instances, auxiliary publications, such as books, sets of tables, directories, and other items may be issued as a byproduct of committee investigation. The great amounts of information collected by the committees for study are often retained and in some cases specialized information centers are formed and maintained within NAS–NRC long after a particular committee has been dissolved.

To a greater or lesser degree, such information services as brief answers to technical inquiries, consulting or advisory services, and referral of inquiries to other organizations or specialists are performed by all the groups in NAS–NRC. A central point of access is the Office of Information, also listed below.

Advisory Committee on Atomic Bomb Casualty Commission

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 324 or, direct dialing, 961–1324 (Area code: 202)

The Commission conducts research in cooperation with the Japanese National Institutes of Health and the Japanese Ministry of Health and Welfare on the nature and extent of the long-term effects of radiation on the exposed populations of Hiroshima and Nagasaki. It conducts data-gathering and processing programs on A-bomb survivors and control groups, utilizing a variety of techniques, such as census taking, field investigations and interviews, questionnaires, records of vital statistics, searching and abstracting, medical examinations, laboratory tests, radiological examinations, autopsies, and other pathological studies.

The Commission issues an English-Japanese technical report series that is designed to facilitate discussion of work in progress preparatory to publication, to furnish data of a general reference value, and to register the work of the Commission. In general, copies of the reports are limited to the staff of the Commission and to allied scientific groups. All significant findings are also published in journals, including the *Hiroshima Igaku,* the journal of the Hiroshima Medical Society, that has a section devoted exclusively to Commission reports of general interest which have not been published elsewhere in Japanese. As part of the technical report series, the Commission issues bibliographies of its published papers. These bibliographies, which have also been published in *Hiroshima Igaku,* include: *Bibliography of Published Papers of the Atomic Bomb Casualty Commission; Bibliography of Publications Concerning Effects of Nuclear Explosions;* and *Bibliography of Publications Concerning effects of Nuclear Explosions II.*

Advisory Committee to the Radiation Registry of Physicians

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 330 or, direct dialing, 961–1330 (Area code: 202)

The purpose of the Advisory Committee is to study the possible effects of chronic exposure to ionizing radiation on the morbidity and mortality of physicians and their offspring. The members of the American College of Radiology constitute the population at risk while those of the College of American Pathologists serve as a comparison group. Data are collected by questionnaire, analyzed at the School of Hygiene and Public Health of Johns Hopkins University, and finally deposited at the Chicago headquarters of the two colleges, the College of American Pathologists being located at Suite 2115, Prudential Plaza, Chicago, Ill., and the American College of Radiology at 20 North Wacker Drive, Chicago, Ill., 60606. When sufficient data have been recorded to permit significant conclusions, the findings will be published in appropriate journals.

Agricultural Board

Division of Biology and Agriculture
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 371 or, direct dialing, 961–1371 (Area code: 202)

The Agricultural Board brings together the scientific talent of Government, industry, and universities into committees for study of all of the broad problems in the diversified field of agriculture; it collects facts and evaluates present knowledge in relation to existing agricultural policies and practices; it determines trends in current agricultural research and suggests areas in which vital, but often neglected, research needs to be done; and it expedites the transition of research discoveries to application in technological practice, governmental policies, or socio-economic affairs. The Board determines areas in which committees of the Board should be established and the types of studies these committees are to make. The Board and its committees conduct no basic research, but serve as a factfinding and advisory group. Material is disseminated to the general public through publications prepared by committees working on specific projects.

Agricultural Research Institute

Division of Biology and Agriculture
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 371 or, direct dialing, 961–1371 (Area code: 202)

Affiliated with the Agricultural Board is the Agricultural Research Institute, which provides a forum of unrestricted discussion of problems common to agricultural scientists in Government, industry, and universities. A secondary function is to provide financial support for the work of the Agricultural Board. One, dues-paying, group of members includes industrial firms and trade associations engaged in the production, processing, and marketing of agricultural products, in the manufacture of agricultural equipment materials and supplies, and in other activities whose special interests depend on an efficient agricultural industry and research program. The second group of members are exempt from dues and include Federal and State agricultural experiment stations, scientific societies, and other nonprofit scientific associations. Annual meetings and committee work provide personal contact between representatives of ARI and the members of the Agricultural Board. Inquiries are answered either directly or by referral to an appropriate source within ARI.

Armed Forces–NRC Committee on Vision

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 505 or, direct dialing, 961–1505 (Area code: 202)

The Committee's function is to provide access to scientific and technical information relating to problems on vision and to assist in the exchange of information in this area. A literature collection, consisting mainly of Government reports and selected technical papers, is accessible to approved visitors. In response to requests, the Committee answers technical questions and provides information on current research and development.

Services are primarily for Department of Defense and other Government agencies, but are also available to others having the necessary qualifications.

Building Research Advisory Board

Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 348 or, direct dialing, 961–1348 (Area code: 202)

The Building Research Advisory Board functions in an advisory capacity to governmental units and to private groups and organizations when in the national interest. It surveys the science and technology of building, recommends criteria, defines areas requiring further research, and suggests the direction which such research should take. It conducts conferences, supervises or conducts scientific and technical research and investigations, and disseminates resulting information.

International conferences recently sponsored were on the subjects of shell structures and permafrost; others in the planning stage include building problems in developing nations and performance criteria for building components. A workshop on termite research and a symposium on underground corrosion and cathodic protection have also been sponsored. Studies resulting in advisory recommendations are conducted on a great variety of subjects, such as adhesive-bonded structural components, flue-fed incinerators, criteria path methods for construction projects, foundation piling, dimensional tolerances for concrete construction, cold-storage facilities, educational facilities for schools of business management, building-demolition waste disposal, and slope stability ratios for soils.

Information services provided at this time are geared to the capabilities of the Board and its committees and staff. Referral is made to appropriate information sources, should the desired information not be immediately available through the staff. Plans are being developed for providing as comprehensive an information service as possible for the field of building.

Publications are available individually or in a subscription series from the NAS–NRC Printing and Publishing Office.

Committee on Anesthesia

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C.. 20418
Telephone: 383–8100 Extension 307 or, direct dialing, 961–1307 (Area code: 202)

The Committee on Anesthesia coordinates nationwide studies on anesthetic side effects and conducts conferences on basic scientific aspects of research. An extensive investigation of the effects of halothane anesthesia compared with those of other inhalation agents is being conducted to determine the possible role of halothane in post-operative liver dysfunction.

Committee on Blood and Transfusion Problems

Divsion of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 340 or, direct dialing, 961–1340 (Area code: 202)

The Committee on Blood and Transfusion Problems, in conjunction with the Committee on Plasma and Plasma Substitutes and the Committee on Thrombosis and Hemmorrhage, provides scientific advice to the U.S. Department of Health, Education, and Welfare, Department of Defense, and the American National Red Cross, operating agencies concerned with the National Blood Program. It monitors research on blood pertinent to problems of importance in the National Blood Program. It has sponsored a conference on the preservation of blood at low temperatures and has investigated such problems as the *in vivo* survival of infused red cells and the significance of donor variables. The Committee has also prepared a compendium of good practice in therapeutic transfusion, entitled *General Principles of Blood Transfusion,* which is available from J. P. Lippincott Co., East Washington Square, Philadelphia, Pa.

Committee on Drug Addiction and Narcotics

Division of Medical Sciences
National Academy of Sciences–National Research Council
c/o National Institutes of Health
National Bank Building, Room 310
Bethesda, Md. 20014
Telephone: 496–4410 (Area code: 202)

With the support of the World Health Organization and the U.S. Veterans Administration, the Committee has established an information center on narcotics and addiction. The collecting, indexing, and coding of pertinent literature is carried out by the Committee in collaboration with the American Social Health Association in New York and the Alcoholism and Drug Addiction Research Foundation in Toronto, Canada. These groups prepare the *Index of the Literature on Addiction, Addicting Drugs, Analgesics and Antitussives,* which is coded on master cards. Five codes are used: drugs; categories, consisting of broad characterization of materials; effects; addiction, habituation, and tolerance; and modifying factors. The *Index* is both microfilmed and processed on IBM cards for computer retrieval. Copies of the microfilm and the IBM deck are deposited with the Committee, the American Social Health Association, the Alcoholism and Drug Addiction Research Foundation, the Department of Pharmacology at the University of Michigan, and the World Health Organization. Inquiries regarding the use of the *Index* may be addressed to the Committee or to the cooperating agencies.

The Committee has an extensive retrospective collection of references on the opium alkaloids. Some of this material was published as a U.S. Public Health Service monograph in 1941, *The Pharmacology of the Opium Alkaloids,* but this publication is now out of print.

Committee on Fire Research

Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 486 or, direct dialing, 961–1486 (Area code: 202)

Sponsored by the Office of Civil Defense, U.S. Department of the Army, the National Bureau of Standards, the National Science Foundation, the U.S. Forest Service of the Department of Agriculture, the Committee on Fire Research conducts studies on the control of mass fires, including forest fires, urban fires resulting from incendiary bombs, and oil refinery fires. Books, journals, reports, and data are collected on such specific subjects as ignition phenomena, thermal decomposition, heat and material transfer, diffusion flames, combustion principles, radiation, suppression of combustion, model studies and scaling laws, atomization of liquids, meteorological interactions, operational research principles, instrumentation, fire fighting techniques equipment design, and materials of construction.

Technical advice and consultation is provided to Government agencies on the prevention and control of war and peacetime fires. Restricted access to the literature and data collection is available to qualified users.

Fire Research Abstracts and Reviews, issued gratis by the Committee three times a year, provides annually about 250 abstracts from American, British, Russian, and European literature in the field of fire research. Author and subject indexes in each issue and a cumulative annual index are provided. A cumulative 5-year author and subject index covering all issues published through 1963 is also available. The Committee is also the publisher of a *Directory of Fire Research in the United States,* NAS-NRC Publication 1189.

Committee on Hyperbaric Oxygenation

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 307 or, direct dialing 961–1307 (Area code: 202)

Impressed with the potentialities in a wide variety of medical and surgical conditions when oxygen is administered under increased atmospheric pressures, the Committee has initiated a number of studies. A report has been prepared on present knowledge of the physiological effects of hyperbaric oxygenation, possible clinical applications, suggested studies in animals, and hazards of operation. The Committee has stimulated establishment at a university center of a complete information service to include publication of a news bulletin, assisted by domestic and foreign correspondents. In preparation is a manual on the construction and operation of hyperbaric facilities. The report on *Hyperbaric Oxygenation: Potentialities and Problems* is available on request.

Committee on Plasma and Plasma Substitutes

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 340 or, direct dialing, 961–1340 (Area code: 202)

In cooperation with the Committee on Blood and Transfusion Problems and the Committee on Thrombosis and Hemorrhage, the Committee on Plasma and Plasma Substitutes provides advisory services to the operating agencies in the National Blood Program. The Committee monitors current research on blood plasma, plasma components and plasma substitutes, including all parenteral solutions; conducts conferences on aspects of current problems; and makes recommendations concerning future studies. The Committee is investigating the utility of several macromolecular agents for intravenous use, including an hydroxyethylated preparation of waxy sorghum starch. Two conferences on artificial colloidal agents have been held, the first in 1962 and the second in 1963; a Conference on Colloidal Agents Derived From Human Blood was also held in 1963. The Committee is also concerned with specifications for plasma substitutes, and has formulated criteria for the preparation and testing of natural or artificial colloidal solutions for intravenous use.

In 1962, the Committee sponsored a Symposium on Gamma Globulin. The use of gamma globulin and the hyperimmune globulins in the prophylaxis of various diseases, including post-transfusion hepatitis, is currently being studied.

Committee on Polar Research

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 496 or, direct dialing, 961–1496 (Area code: 202)

The Committee on Polar Research was established in 1958 at the request of the National Science Foundation to advise on U.S. programs of research in the polar regions. It represents the National Academy of Sciences in the Scientific Committee on Antarctic Research of the International Council of Scientific Unions. Publications of the Committee include: annual *Reports to SCAR on United States Antarctic Research Activities,* with bibliography, available on request; *Science in Antarctica, Part I: The Life Sciences in Antarctica,* NAS-NRC Publication 839, 1961, and *Part II: The Physical Sciences in Antarctica,* NAS-NRC Publication 878, 1961; *Science in the Arctic Ocean Basin,* NAS-NRC Publication 1086, 1963; and *Symposium on Antarctic Logistics: Proceedings of the SCAR Meeting, Boulder, Colorado, August 1962.*

Committee on Prosthetic—Orthotic Education

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 351 or, direct dialing, 961–1351 (Area code: 202)

The Committee is sponsored by the Vocational Rehabilitation Administration, U.S. Department of Health, Education, and Welfare, and the U.S. Veterans Administration. Its two major functions are to develop educational and informational programs in the interest of improving rehabilitation services to amputees and other orthopedically handicapped individuals, and to collect information relating to clinical practice in prosthetics and orthotics. Acting as a clearinghouse in these areas, the Committee answers inquiries directly or by referral.

The publication *Artificial Limbs* is sponsored jointly by the Committee and the Committee on Prosthetics Research and Development, Division of Engineering and Industrial Research of the NAS-NRC.

Committee on Prosthetics Research and Development

Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 345 or, direct dialing, 961–1345 (Area code: 202)

The Committee on Prosthetics Research and Development correlates and coordinates prosthetics and orthotics research sponsored by the Veterans Administration, the Vocational Rehabilitation Administration, the National Institutes of Health, the Army, the Navy, and other Government agencies. It disseminates findings on the development of new devices and techniques to organizations concerned with the education of medical and paramedical personnel in the fields of prosthetics and orthotics. The Committee cooperates with various other groups interested in information on prosthetic research and development by providing them with literature in the field. Such groups include the Information Center of the Committee on Prosthetics, Braces and Technical Aids; the International Society for Rehabilitation of the Disabled, Copenhagen; Excerpta Medica, Amsterdam; and the National Society for Crippled Children and Adults. An important activity of the Committee is the Subcommittee on Child Prosthetics Problems, which serves as the point of coordination for 17 child-amputee centers involved in developing, collating, and analyzing prosthetic data. A newsletter prepared by the New York University Child Prosthetic Studies reports the findings and related information of the centers.

The Committee provides brief answers to technical inquiries, as well as referral and advisory services. It prepares bibliographies and analytical or evaluative reports. Periodicals that are available without charge are *Artificial Limbs,* distributed semi-annually by the Committee and *Inter-Clinic Information Bulletin,* issued monthly by the Child Prosthetic Studies, Research Division, College of Engineering, New York University. Conference reports that are available free of charge from the Committee include *Orthotics Research and Development,* June 1962; *The Geriatric Amputee,* April 1961; and *The Application of External Power in Prosthetics and Orthotics,* September 1960.

Committee on Radio Frequency Requirements for Scientific Research

Division of Physical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 319 or, direct dialing, 961–1319 (Area code: 202)

The Committee considers the needs of U.S. science for radiofrequency allocations and works with the Government in securing them. It also coordinates the views of American scientists and works with the Inter-union Committee on Frequency Allocations for Radio Astronomy and Space Science of the International Council of Scientific Unions. In carrying out these functions, the Committee also serves as a source of information and provides a referral service for scientists interested in the field.

Committee on Sanitary Engineering and Environment

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 330 or, direct dialing, 961–1330 (Area code: 202)

The Committee conducts studies and prepares reports on environmental health problems of importance to the military and to public health. Areas of interest include atmospheric and industrial hygiene, food sanitation, waste disposal, water supply, thermal factors in environment, and sanitary engineering. A new nomenclature for heat illness, developed in cooperation with the British Medical Research Council, has been submitted for consideration and possible adoption by the World Health Organization. The Committee has provided the U.S. Army with recommendations concerning the disposal of toxic industrial wastes by deep underground injection; it also recommended the establishment of a national registry of deep injection wells by appropriate Government agencies. The Public Health Service has received recommendations from the Committee regarding educational needs in environmental health.

The Committee is prepared to render scientific advice to any Government agency and to any recognized private national agency on formal request. Beyond this, liaison with Government and private agencies is maintained to encourage informal exchange of ideas and informal exploration of problems. Through continuing surveillance of the field, the Committee is alert to emergent problems and needs and fosters initiation of studies in the national interest. Evaluation of devices and processes are made only on request from Government agencies that provide appropriate supporting data.

Committee on Shock

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 307 or, direct dialing, 961–1307 (Area code: 202)

The Committee sponsors special workshops on basic procedures employed in the study of animals and humans in shock. Various types of shock are covered, including hemorrhagic, traumatic, infectious, and immunological.

The Committee prepares bibliographies and publishes the proceedings of conferences and workshops. Available are the *Proceedings of a Conference on Recent Progress and Present Problems in the Field of Shock,* for sale from the Federation of American Societies for Experimental Biology, 9650 Wisconsin Avenue, Bethesda, Md., and the *Annotated Bibliography on Shock, 1950–1962,* NAS–NRC Publication 1182. The latter publication is an annotated and liberally cross-indexed bibliography of 944 reports arranged according to the different forms of experimental shock, experimental animal species, and types of publications.

Critical analyses of laboratory tools at the disposal of those investigating shock are available in the form of minutes of workshops dealing with measurement of blood volume and of cardiac output, evaluation of methods of analysis of expired air in human metabolic studies, evaluation of electrodes for measurement of human Po_2, P_{co_2} and pH, and the measurement of vasoactive substances in biologic fluids.

Committee on the Cutaneous System

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 315 or, direct dialing, 961–1315 (Area code: 202)

The Committee is concerned with all aspects of the effects of environmental stress on human skin, including problems of physical, chemical, and biological origin. It sponsors conferences and is cognizant of current research activities in this field.

Committee on Thrombosis and Hemorrhage

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 340 or, direct dialing, 961–1340 (Area code: 202)

The Committee on Thrombosis and Hemorrhage provides advisory services to the operating agencies in the National Blood Program, as do the Committee on Blood and Transfusion Problems and the Committee on Plasma and Plasma Substitutes. Among the projects of the Committee on Thrombosis and Hemorrhage is an investigation of plasma preparations containing antihemophilic factor (AHF) for therapeutic use and stimulation of development of standards of potency and methods of assay for AHF preparations.

Committee on Tissue Transplantation

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 315 or, direct dialing, 961–1315 (Area code: 202)

The Committee is interested in all aspects of tissue transplantation, but has concerned itself particularly with the problems of immunological mechanisms and the followup of kidney transplants in humans. In 1962 the Committee cosponsored a conference on The Thymus in Immunobiology; proceedings are available from Harper and Row, New York. A conference on Cell-Bound Antibodies was published by the Wistar Institute Press, Philadelphia, in 1963. A 1964 conference and workshop on Tissue Histocompatibility

Testing is being published by NAS–NRC. Conferences scheduled for 1965 include a followup on the 1962 Kidney Transplant conference and one on the Antigens of the Embryo.

Committee on Trauma

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 307 or, direct dialing, 961–1307 (Area code: 202)

Concerned with the prevention and treatment of severe trauma, the Committee collects information on the diagnosis and early treatment of injuries and the primary and secondary causes of death following trauma. The Committee maintains continuing interest in stimulating research in the care of burns and in the mechanisms of wound healing. Emphasis is placed on the need for complete autopsies of fatal cases of trauma in order to improve means of recognizing and dealing with frequently unrecognized injuries manifesting minimal clinical signs and symptoms.

Conference reports are available on vasodilator agents in management of wound shock and studies on low molecular weight dextran.

Conference on Electrical Insulation

Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 486 or, direct dialing, 961–1486 (Area code: 202)

The Conference on Electrical Insulation stimulates and encourages foreign and U.S. research in the field of dielectrics and insulations, including plastics, semiconductors, and related subjects. It prepares the annual *Digest of Literature on Dielectrics,* which provides reviews and bibliographies of recent developments and trends in many scientific areas related to dielectrics. Also published is the *Conference on Electrical Insulation Annual Report,* which contains extended abstracts of papers presented at the annual meetings and usually not published elsewhere. Both publications are available through the Printing and Publishing Office of the NAS–NRC.

Follow-up Agency

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 961–1468 (Area code: 202)

The Follow-up Agency exists to exploit the medical, including environmental, experience of wartime for the creation of significant new information on the natural history of disease. Materials used include individual and unit records of the Armed Forces in World Wars I and II and the Korean war, and the records of veterans created by the Veterans Administration. Information is also generated through direct examination and by questionnaires. Studies range over the whole field of medicine and typically are directed at specific problems in the epidemiology, prognosis, or course of a specific disease, or at the effects of specific environmental influences.

The Agency does not make available any data collections, but does provide reference and advisory services in response to inquiries. Research results are usually published in the general medical literature. Some more extensive reports have been issued by the Veterans Administration as *VA Medical Monographs.* A cumulative listing, revised annually, of reports and journal articles emanating from the program, *Bibliography of Program of Medical Follow-up Studies on Veterans,* is available from the NAS–NRC.

Food and Nutrition Board

Division of Biology and Agriculture
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 366 or, direct dialing, 961–1366 (Area code: 202)

The Food and Nutrition Board serves to promote needed research in the broad field of food and nutritional science and to evaluate this science in the interests of the public welfare. The Board may act on its own initiative or on request from public or private agencies. Members of the Board are appointed from among leaders in the sciences related to food and nutrition. Contact with Federal agencies, scientific societies, and other associations is maintained through appointed liaison representatives of these organizations. Specific activities of the Board are carried on by committees concerned with such subjects as protein nutrition, fats, child nutrition, dietary allowances, and other areas of human nutrition.

The Board conducts meetings and issues publications; it also cooperates with United Nations agencies, such as UNICEF, FAO, and WHO in their applied nutrition programs. Inquiries are answered either directly or by referral.

Food Protection Committee

Division of Biology and Agriculture
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 367 or, direct dialing, 691–1367 (Area code: 202)

The Food Protection Committee operates under the Food and Nutrition Board, but is independently financed by grants from food, chemical, and packaging companies, commercial laboratories, and individuals. The Committee serves as a factfinding and advisory body for Government and industry. It provides critical evaluation of information concerning the safety of use of chemical additives in food, stimulates the acquisition, through research, of information adequate to establish the safety of such additives, and fosters continued cooperation between industry and agencies of the public in assuring the wholesomeness and safety of the food supply. Public release of the Committee's reports is subject only to the approval of the Food and Nutrition Board.

The Committee has developed and published guiding principles for evaluating the safety and establishing tolerance levels for chemicals used in food production, processing, and packaging. Recently it has been concerned with the revision of *The Use of Chemical Additives in Food Processing,* NAS–NRC Publication 398, and development of a *Food Chemicals Codex,* a book of standards for food grade chemicals, which is now being compiled with the advice of panels composed of scientists from industry, Government, and academic institutions. It is designed to define food grade chemicals in terms of specifications of identity and purity in a series of several hundred individual monographs. These monographs include, insofar as possible, name and synonyms, formula, specifications of identity and purity, and methods for evaluating the purity of a chemical permitted for a food use. The monographs are initially published in looseleaf form available by subscription; the first edition in book form, which will contain approximately 600 monographs on direct food additives and ingredients amenable to chemical characterizations, is scheduled for publication in 1966.

New Developments on Problems in the Use of Pesticides, NAS–NRC Publication 1082, 1963, proceedings of a symposium, is also a Committee publication.

Geophysics Research Board

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 401 or, direct dialing, 961–1401 (Area code: 202)

The Geophysics Research Board was established in 1960 to effect participation by American scientists in the activities of the new International Geophysics Committee of the International Council of Scientific Unions, and to stimulate and encourage research interest in the United States in geophysics and related fields. Through its Committee on IQSY and its Panels, the Board develops and coordinates U.S. contributions to the International Years of the Quiet Sun, the World Magnetic Survey, the Upper Mantle Project, Solid Earth Geophysics, and International Exchange of Geophysical Data.

The Board has assumed responsibility for the terminal activities and publications program of the U.S. National Committee for the International Geophysical Year and maintains an index and file of documents related to the IGY. A bibliography on U.S. contributions to IGY–IGC has been published as a joint project of the Library of Congress, the National Science Foundation, and the National Academy of Sciences. Entitled *United States IGY Bibliography 1953–1960,* IGY General Report No. 18, NAS–NRC, 1963, it contains 2,853 abstracts arranged in alphabetical order by author within subject categories; author and subject indexes are provided.

The official records and data of the world IGY program are being published under the direction of the International Geophysics Committee by Pergamon Press as the *Annals of the International Geophysical Year.* A majority of the planned 46 volumes has been published and includes instruction manuals for the IGY disciplines, conference proceedings, history and background, scientific papers on the findings, and compilations of data by discipline. Copies may be purchased from Pergamon Press.

The *IG Bulletin* is issued by the Board in cooperation with the American Geophysical Union and is reprinted quarterly in the *AGU Transactions.* Successor to the *IGY Bulletin,* it is a monthly survey of plans, activities, and findings in geophysics, with emphasis on U.S. contributions to international endeavors.

Highway Research Board

Mail:
Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418

Location:
1707 H Street NW.
Washington, D.C.
Telephone: 393–8100 Extension 334 or, direct dialing, 961–1334 (Area code: 202)

Supported by Federal and State Government agencies, as well as organizational and individual members, the Highway Research Board provides a national clearinghouse and correlation service for research activities and information relating to highway administration, transport, and technology; it also sponsors an annual meeting for highway administrators and technologists. Areas of interest are highway engineering technology, including economics, finance, and administration; design, materials, and construction; maintenance; traffic and operations; soils and foundations; urban transportation research; and legal studies.

The Highway Research Correlation Service is supported by and restricted to the State highway departments. It determines the existence of highway problems, encourages the initiation of research efforts, and advises its subscribers of current research in other agencies. Information services include assistance in the formulation of specific research projects, preparation of bibliographies, information searches based on HRB's library holdings, compilation of summaries of regional practices or procedures relating to specific problems, and preparation of lectures for conferences and schools.

A special service, similar to the Correlation Service, is provided for the Bureau of Public Roads, U.S. Department of Commerce.

Organizations, groups, or individuals engaged in highway research or highway transportation activities are eligible for membership in HRB. Various categories of membership are available which determine the type of service and the number of publications provided. Further information regarding membership and application forms may be obtained from the Board.

HRB publications, available for purchase from the Board by anyone, include the *Highway Research Board Bibliography,* an irregular, numbered series of comprehensive bibliographies on specific highway and transportation problems; *Highway Research Abstracts,* issued monthly and containing abstracts of current highway literature, announcements of HRB meetings, and synopses of papers to be given at such meetings; *Highway Research News,* issued irregularly; *Highway Research Record,* a numbered series devoted mainly to papers given at annual meetings of the Board; *Highway Research Review,* an indexed listing of highway research projects in progress or completed as reported by Government agencies and private institutions; and *Special Reports,* an irregular series. Both annual and cumulative indexes to all HRB publications are also for sale.

A numbered series of frequently issued technical reports, the *National Cooperative Highway Research Program Reports,* was initiated in 1964 for distribution to sponsors of the National Cooperative Highway Research Program; others may purchase these reports from the Board.

A list of HRB publications is available on request.

Institute of Laboratory Animal Resources

Mail:
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418

Location:
American Association of University Women Building
2401 Virginia Avenue NW.
Washington, D.C.
Telephone: 393–8100 Extension 370 or, direct dialing, 961–1370 (Area Code: 202)

The Institute serves as a central agency for correlating and disseminating information on animal stocks used in biological, agricultural, and medical research and in assay methods, testing, and teaching. It is also responsible for developing standards in the areas of facilities, transportation, nutrition, breeding, sanitation, disease prevention, and use of laboratory animals.

Technical inquires are answered, and a quarterly newsletter, *Information on Laboratory Animals for Research,* is distributed to 1,200 researchers and breeders without charge. Other publications include *Lab-*

oratory Animals. Part I: Guide for the Shipment of Small Laboratory Animals; Laboratory Animals. Part II: Animals for Research, a directory of sources of experimental animals, both domestic and wild, together with sources for equipment, materials, and feed required in animal maintenance; and *Laboratory Animals. Part III: Recommended Minimum Standards for the Shipment of Laboratory Primates,* a detailed enumeration of procedures for the shipment of primates and pertinent U.S. import regulations. These three publications are for sale and may be obtained from the Printing and Publishing Office of the NAS–NRC.

The following standards published by the Institute are available without charge: *Standards for the Breeding, Care and Management of Laboratory Mice; Standards for the Breeding, Care and Management of Laboratory Rats; Standards for the Breeding, Care and Management of the Syrian Hamster;* and *Standards for the Breeding, Care, and Management of Guinea Pigs.*

Maritime Cargo Transportation Conference

Mail:
Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418

Location:
American Chemical Society Building
1155 16th Street NW.
Washington, D.C.
Telephone: 393–8100 Extension 425 or, direct dialing, 961–1425 (Area code: 202)

Sponsored by the U.S. Departments of Defense and Commerce, the Maritime Cargo Transportation Conference provides guidance on means and techniques for improving systems and system elements of water transportation.

Since its beginning in 1953, MCTC has produced nine studies pertaining to: an entire export transportation system from shipper to consignee; the loading of general cargo ships in selected U.S. ports; roll-on, roll-off sea transportation and containerization systems; shipboard cranes versus burtoning gear; longshore safety; and factors affecting ship turnaround in the port of San Francisco. MCTC also played an important role in the recent *Comet-Challenger* ship evaluation tests by supervising the comparative analysis of the ships' performances.

Another important function of MCTC is the stimulation and correlation of maritime research. This purpose has been served through publication of two selective bibliographies, the holding of three research symposia, and sponsorship of numerous informal conferences of maritime researchers. MCTC provides information on current research by MCTC and other groups; this service is available to anyone with an interest in maritime problems.

A significant part of MCTC's effort, since its establishment, has been to provide factual information as a contribution to improved labor-management relations and the stimulation of interest in regard to the favorable effects of maritime research on the industry as a whole.

Materials Advisory Board

Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 436 or, direct dialing, 961–1436 (Area code: 202)

Sponsored by the U.S. Department of Defense, the Materials Advisory Board conducts studies and surveys and makes critical analyses in the areas of metallurgy and organic and inorganic nonmetallic materials, particularly materials for use in normal and extreme temperatures, high vacuum, zero gravity, or extreme radiation environments. A collection of journals, reports, and unpublished data in materials research and development is maintained for in-house use.

Consultation and referral services are available to the Department of Defense and its contractors. Three types of reports are issued: MAB reports prepared in response to primary assignments; staff reports which present the findings of factual studies; and letter reports which are prepared in response to subassignments or where a particular situation requires an immediate interim report. Primary distribution of MAB reports is decided by the Department of Defense. A few selected reports receive their secondary distribution to the Department of Defense, its contractors, and some nonmilitary agencies through the Defense Documentation Center and are announced in that agency's bulletin, *TAB.* The Board also issues an annual cumulative listing of MAB reports.

Medical Records Section

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 322 or, direct dialing, 961–1322 (Area code: 202)

The Medical Records Section is responsible for maintaining and indexing a complete file of all publications and internal reports issued by the Division of Medical Sciences and its various committees, as well as pertinent material of other divisions of the NAS–NRC. The Section has an extensive file of reports issued during World War II, covering all aspects of military medicine. Included in this collection are the reports of the Committee on Medical Research of the U.S. Office of Scientific Research and Development, most of which are unclassified. These OSRD reports are indexed by title, subject, contract number, and author; many pertain to aviation medicine. A selected file of classified and unclassified British and Canadian reports, both wartime and current, is also maintained and indexed by title and subject. Appointment for on-site use may be requested; reference services based on the collections are provided within the limits of available staff time.

NAS–NRC Committee on Hearing, Bioacoustics, and Biomechanics

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone 393–8100 Extension 505 or, direct dialing, 961–1505 (Area code: 202)

The objectives of the Committee are to assist in providing access to scientific and technical information pertaining to hearing, bioacoustics, and biomechanics problems, and to facilitate exchange of research information in these areas. A literature collection is maintained, consisting primarily of Government reports and selected technical papers.

The Committee provides answers to technical questions and information concerning current research and development projects. Services are primarily for U.S. Department of Defense and other Government agencies, but are available also to others having the necessary qualifications. The literature collection is accessible to approved visitors.

NAS–NRC Library

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone 393–8100 Extension 272 or, direct dialing, 961–1272 (Area code: 202)

The Library collection consists of a virtually complete set of the publications of the National Academy of Sciences–National Research Council; a selected number of reference publications, such as dictionaries, biographical dictionaries, encyclopedias, indexing and abstracting publications, college and university catalogs, and similar works; a very small assortment of monographic works in several subject areas, such as physics, chemistry, medicine, anthropology, and other fields of interest to NAS–NRC activities; and several hundred selected periodicals which are appropriate to a collection oriented, in a very broad sense, to science and technology. The Library relies heavily on inter-library loans to supplement its own resources.

The collection is open to the scientific and academic community and to Government officials and members of industrial and commercial organizations, who may use the facilities for reference or obtain material via interlibrary loan through their own libraries. Telephone inquiries requiring reference services based on the collection are accepted.

Office of Critical Tables

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extensions 387 and 339 or, direct dialing, 961–1387 and 961–1339 (Area code: 202)

A clearinghouse for information on critical tables of numerical data for the physical sciences and technology, the Office maintains awareness, at both the national and international level, of continuing numerical data projects. It provides advisory services of several types to the National Standards Reference Data Program at the U.S. National Bureau of Standards and serves as a link between that program and the compilational resources of the United States and other countries. An up-to-date file on existing unclassified data projects is maintained. The Office also stimulates and coordinates national and international activities on standardization matters, such as fundamental constants, symbols, and terminology.

3 OF 6

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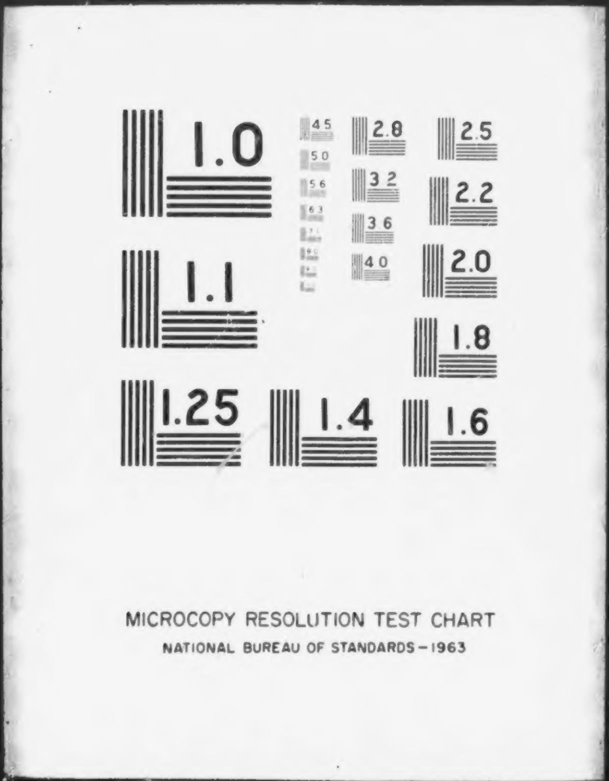
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NATIONAL BUREAU OF STANDARDS-1963

A *Directory of Continuing Numerical Data Projects—A Survey and Analysis by the Office of Critical Tables,* NAS–NRC Publication 837, is available. The directory covers the activities of more than 30 data compilation groups located in the United States and Europe in terms of organization; substances; properties; sources of data; criticality; use of nomenclature, symbols, units and physical constants; currency; format; and publication and distribution. Also published by the Office is *The Consolidated Index of Selected Property Values: Physical Chemistry and Thermodynamics,* NAS–NRC Publication 976. This first volume of a projected series presents in codified form all properties for all substances covered by the publications of six data compilation groups.

Office of Documentation

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 245 or, direct dialing, 961–1245 (Area code: 202)

The initial functions given to the Office of Documentation cover three major areas of interest: advice to the National Science Foundation and others as appropriate in broad problems of scientific documentation, including the recording, storage, retrieval, and dissemination of information to serve the needs of science; provision of a mechanism for the participation of American scientists and documentalists in international activities related to scientific documentation; and advice and assistance to the several activities of the NAS–NRC in the documentation problems encountered by them.

Among recent tasks completed by the Office are an evaluative study of the metallurgical searching service of the American Society for Metals and Western Reserve University, the results of which are reported in NAS–NRC Publication 1148, and a chemical notation systems survey conducted jointly with the Division of Chemistry and Chemical Technology and reported in NAS–NRC Publication 1150. A booklet describing the scientific information activities of the NAS–NRC published in 1963 as NAS–NRC Publication 1031 is currently undergoing revision. Current concerns include active study of the needs and problems related to documentation in the behavioral sciences and evaluation of current practices in automatic language processing and machine translation.

In 1963 the Office sponsored, jointly with the Pacific Science Board of the NAS–NRC and the East-West Center of the University of Hawaii, a Conference on Asian-Pacific Information Centers. As the U.S. national member of the Fédération Internationale de Documentation, the NAS–NRC, though the Office of Documentation, has played a leading role in reorganizing the U.S. representation to the FID and arranged for the FID to hold its 1965 conference in Washington, D.C.

Office of Information

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 518 or, direct dialing, 961–1518 (Area code: 202)

The Office of Information provides a central point of access to the various units of the NAS-NRC. It maintains awareness of specialized capabilities and refers requests accordingly. In cases where an inquiry directed to a particular board, committee, or office of the NAS-NRC is not satisfied, the requester is encouraged to contact the Office of Information for further guidance.

Office of the Foreign Secretary

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 507 or, direct dialing, 961–1507 (Area code: 202)

The Office of the Foreign Secretary serves as the adhering organization for the United States to the International Council of Scientific Unions and is the sponsor of national committees for each of the constituent international unions. It administers the science book program, a project of the Agency for International Development involving low-cost distribution of scientific and technical books to Brazil and Central America, Ethiopia, Nigeria, Iran, Turkey, Indonesia, and Korea; conducts scientific exchange programs with the USSR and East Europe; and is currently sponsoring the preparation of a directory of scientific research and information facilities in east Africa. The Office provides information concerning international, nongovernmental, scientific organizations to the U.S. Department of State, to other Government agencies, and to individual scientists.

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The Pacific Science Board, a responsibility of the Office of the Foreign Secretary, aids U.S. scientists engaged in research in the Pacific area. It has surveyed the scientific facilities and information services used in the Republic of Indonesia, Japan, the Federation of Malaya, the State of Singapore, and the Republic of Vietnam in order to promote the exchange of scientific information between these areas and the United States. The Board also conducts ecological research in the Pacific Islands, with emphasis on the collection of geographic data concerning coral atolls, and it is preparing an annotated index of terms describing reefs, both coral and algal. Selected ecological, botanical, zoological, and geological bibliographies are prepared for inclusion in the index.

The Latin America Science Board was created by the Office to advise the Agency for International Development on the scientific and technological aspects of the programs under the Alliance for Progress. Its mandate calls for being adequately informed in these fields, including secondary and higher education. There is a modest information retrieval system on a number of documents and publications dealing with the natural and social sciences in Latin America and efforts have been made to record biographical information on selected Latin American scientists.

Publications include: *Proceedings of the International Conference on Scientific Information,* 1958; *Report on Scientific Institutions and Research Scientists in Mexico,* 1962; *Island Bibliographies,* compiled by F. Raymond Fosberg and Marie-Helene Sachet, 1955, NAS–NRC Publication 335; and *The East European Academies of Sciences, A Directory,* 1963, NAS-NRC Publication 1090.

Prevention of Deterioration Center

Mail:

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418

Location:

National Research Council Annex
2101 E. Street NW.
Washington, D.C.
Telephone: 393–8100 Extension 356 or, direct dialing, 961–1356 (Area code: 202)

The Prevention of Deterioration Center is a depository for information on the effects of natural and induced environmental effects on materials and equipment and methods of deterioration prevention and control. Its collection includes some 70,000 documents and screening data on 15,000 candidate fungicides. Documents are loaned from the PDC collection and on-site use of the collection may be requested. Bibliographies and state-of-the-art reports are prepared.

By providing advisory services, consultation, information gathering and dissemination, and question answering, PDC serves Government agencies, industry, and universities concerned with the protection of materials and equipment against deteriorative environments.

The monthly *Environmental Effects on Materials and Equipment Abstracts* is published by PDC in two sections: *Section A* relates to the earth-associated "natural" environments; *Section B* concentrates on thermal, mechanical, and space-associated environmental factors. It is available without charge to Government agency sponsors; others may subscribe.

Ship Hull Research Committee

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 452 or, direct dialing, 961–1452 (Area code: 202)

The Ship Hull Research Committee, successor to the separate NAS–NRC Committees on Ship Steel and Ship Structural Design, has advisory responsibility for the total research program of the Ship Structure Committee, an interagency group made up of the U.S. Coast Guard; the Bureau of Ships and Military Sea Transportation Service, U.S. Navy; the Maritime Administration; and the American Bureau of Shipping. The Committee's research program is designed to improve the hull structure of ships by the extension of knowledge pertaining to design, materials, methods of fabrication, and inspection. The Committee gives advice in choosing research goals; recommends research projects and suitable investigators; evaluates the accomplishments of projects; and appraises the total program. Advisory services are provided.

The Index of Ship Structure Committee Publications, covering SSC reports issued from 1946 to 1958, and a mimeographed supplement that provides a numerical listing of SSC reports from March 1958 through October 1963, are obtainable from the Ship Hull Research Committee by request.

Space Science Board

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 457 or, direct dialing, 961–1457 (Area code: 202)

The Space Science Board provides advice and recommendations on space science to Government agencies and other institutions, and encourages research in the rocket and satellite fields. As the representative of U.S. space scientists to the Committee on Space Research, the Board is responsible for U.S. cooperation in international data-exchange arrangements in this field, including SPACEWARN and the World Data Center A for Rockets and Satellites; it also coordinates the participation of individual scientists in COSPAR symposia, working groups, and panels.

The annual *United States Space Science Program Report to COSPAR* contains a condensed compilation of reports on U.S. space science activities received from numerous individual organizations and scientists, as well as an extensive bibliography of material published on U.S. space sciences. The *Report* and the bibliographies, beginning with the 1956 literature, are available on request from the Board.

Tropical Health Office

Division of Medical Sciences
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 502 or, direct dialing, 961–1502 (Area code: 202)

Serving as an information center on tropical health problems, the Office evaluates, compiles, and indexes reports and current data relating to tropical disease incidence and health, medical services, and medical research institutions in tropical countries. Reference services are available to Government agencies and bona fide research workers.

U.S. National Committee for International Years of the Quiet Sun

Geophysics Research Board
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 402 or, direct dialing, 961–1402 (Area code: 202)

A successor to IGY, IQSY is an international cooperative research program designed to take the greatest possible advantage of the period of minimum solar activity during the years 1964–65. Planned and coordinated through the International Council of Scientific Unions' Special Committee for IQSY, the program includes the study of solar activity and the interplanetary medium, geomagnetism, aurora and airglow, ionospheric physics, cosmic rays and geomagnetically trapped radiation, and meteorology. Data from the 66 participating countries will be exchanged among the World Data Centers. *Guide to International Data Exchange* (*IQSY Disciplines*); *IQSY Notes*, a newsletter on activities; and *IQSY Instruction Manuals* have been prepared by the Secretariat in London. Copies are available on request from the U.S. National Committee, as are publications describing the U.S. program. Information on the various facets of IQSY is included in the *IG Bulletin*.

U.S. National Committee for the International Council for Building Research, Studies and Documentation

Division of Engineering and Industrial Research
National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 348 (Area code: 202)

The U.S. National Committee for the International Council for Building Research, Studies and Documentation serves to effect appropriate U.S. participation in the International Council on behalf of both public and private building interests. The aims of the International Council are to encourage, facilitate, and develop international cooperation in building research, studies, and documentation, covering not only the technical, but also the economic and social aspects of building.

Currently, USNC/CIB cooperates in the collection and exchange of abstracts among members of the International Council. It is also developing working groups in the United States, which will participate in the study of selected subjects covered by various commissions of the International Council.

Information services are presently limited to the referral of requests to members of the National Committee or the International Council, as appropriate.

World Data Center A

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 403 or, direct dialing, 961–1403 (Area code: 202)

Three World Data Centers were established during the International Geophysical Year to collect and make available data taken during that endeavor: WDC-A in the United States, WDC-B in the Soviet Union, and WDC-C in several countries of Western Europe and in Australia and Japan. Data have been archived in the following fields of the IGY program: seismology, gravimetry, longitudes and latitudes, glaciology, oceanography, meteorology, geomagnetism, ionospheric physics, aurora and airglow, cosmic rays, solar activity, and rocket and satellite studies. Each center is responsible for endeavoring to collect a complete set of data in the field or discipline assigned to it; safekeeping of the incoming data; correct copying and reproduction of data to maintain adequate standards of clarity and durability; supplying copies to the other World Data Centers as needed; and preparing catalogs of all data in its charge.

The National Academy of Sciences is responsible for the direction of World Data Center A. As a consequence of the decision that WDC-A should be located by discipline in an institution with a history of active interest and competence in the discipline, WDC-A is divided into 11 subcenters located in 7 cities in the United States. A data center coordination office was established in the National Academy of Science to provide cohesion among the various subcenters in order to insure that the national and international obligations of WDC-A were met.

WDC-A issues semiannual catalogs of data and the *IGY General Report* series, containing miscellaneous reports of the U.S. IGY program. Five of the subcenters issue their own relevant series of IGY reports.

By international agreements, the functions and responsibilities of WDC-A have been extended beyond the IGY on a continuing basis. Currently WDC-A is actively involved with the program of the International Years of the Quiet Sun.

World Data Center A for Rockets and Satellites

National Academy of Sciences–National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 393–8100 Extension 404 (Area code: 202)

One of the 11 subcenters of WDC-A, the Center exchanges scientific data on rockets and satellites, consisting of flight summaries, processed optical and radio observations, and reports and reprints of rocket and satellite results. *Catalogs of Data* are published bienially and cumulated every 2 years. The Center has also issued the *IGY Rocket Report* and *IGY Satellite Report Series.* The functions and responsibility of the Center extend beyond the International Geophysical Year on a continuing basis for the Committee on Space Research of the International Council of Scientific Unions.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

The primary functions of NASA are to conduct research on problems of flight within and beyond the earth's atmosphere, to develop vehicles for this purpose, and to direct space exploration activities. The research program includes the development of spacecraft for manned and unmanned space missions and of all systems required for their support; research in the biosciences; meteorological and communication systems in space, with emphasis on weather and communication satellites; special problems of launch-vehicle technology; spacecraft design as related to the aerospace environment, including guidance, propellant storage, data transmission during entry, and space hazards; nuclear systems technology; chemical propulsion; and tracking and data acquisition.

This effort is the responsibility of various NASA centers located throughout the country. Among them are: The Marshall Space Flight Center, Huntsville, Ala., responsible for the development of vehicles and associated propulsion systems; the Manned Spacecraft Center near Houston, Tex., which has responsibility for development and operation of manned space vehicles and conducts the training of crews for NASA's manned space flights; the Goddard Space Flight Center, Greenbelt, Md., given the responsibility for the development of NASA's sounding rockets and its unmanned earth orbiting spacecraft, including meteorological and communication satellites and orbiting observatories, and for the operation of NASA's tracking network for the collection and reduction of data resulting from these programs; the Ames Research Center at Moffett Field, Mountain View, Calif., which investigates problems of manned lunar flight and other space missions and performs aerodynamic research concerned with the flight of spacecraft through the atmosphere and with investigations related to the flight and landing of supersonic transports and other advanced aircraft; the Flight Research Center at Edwards Air Force Base, Calif., a highly specialized facility for research on manned flight in extreme-performance aircraft in near-space environment; the Langley Research Center, Hampton, Va., concerned with the research and development related to structures and materials for advanced aircraft and spacecraft and with reentry problems, plasma physics, and inflatable satellites; the Lewis Research Center, Cleveland, Ohio, which performs research on propellants, power and propulsion systems, nuclear devices, and the effects of nuclear radiation on spacecraft materials; and the Launch Operations Center at Cape Kennedy, Fla., the primary site for launching NASA earth and deep-space satellites.

Each of these centers is supported by scientific and technical information services. Questions concerning specific capabilities should be directed to NASA's Scientific and Technical Information Division, one of the four divisions described below.

Educational Programs and Services Division

National Aeronautics and Space Administration
Universal Building
1875 Connecticut Avenue NW
Washington, D.C. 20546
Telephone: 382–8301 (Area code: 202)

The program of the Division is devoted to the development, production, and distribution of publications, reports, and motion pictures and other visual aids illustrating the peaceful uses of space. The Division works through and with educational institutions and official organizations at both national and local levels. A booklet, *NASA Educational Programs and Services,* describing the activities of the Office, is available for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. *Educational Publications,* a list of some 40 titles, is free on request from the Educational Programs and Services Division and single copies of the publications listed in this leaflet are available without charge from the same source.

Public Services and Information Division

National Aeronautics and Space Administration
400 Maryland Avenue SW.
Washington, D.C. 20546
Telephone: 962–4155 (Area code: 202)

The Public Services and Information Division releases the following publications for use by the press and by groups and individuals interested in disseminating news of the agency's activities: *Space Activities Summary,* a single-sheet, looseleaf form issued after every NASA launching of a satellite or spacecraft, giving unclassified information on the vehicle, including payload specifications; *Space Sheet,* a semimonthly sheet of prepared news stories and illustrations made available only to bona fide news media; and *News Releases,* issued whenever there is news to report on NASA launches, contract awards, or important developments in current research and other NASA programs.

Scientific and Technical Information Division

National Aeronautics and Space Administration
Universal Building
1875 Connecticut Avenue NW.
Washington, D.C. 20546
Telephone: 382–8114 (Area code: 202)

The Division is responsible for NASA's technical information program, an effort designed to encourage the broadest, most effective dissemination of the scientific and technical information generated by the agency and to further, by means of abstracting and indexing journals, the dissemination of information generated by other agencies and governments in the aerospace sciences and related subjects fields. Functions of the Division include the operation of the library, literature search and translation programs, the dissemination of technical publications, and the extension of management supervision over NASA's Scientific and Technical Information Facility in Bethesda, Md. The facility, currently operated under contract by Documentation, Inc., provides for worldwide acquisition, organization, processing, and reporting of space information together with high-speed information retrieval and dissemination.

Information resulting from or needed in NASA's work is disseminated by the Scientific and Technical Information Division primarily through the following publication series: *Technical Reports,* representing the unclassified presentation of scientific and technical information considered important, complete, and a lasting contribution to existing knowledge; *Technical Notes,* reporting unclassified information less broad in scope but nevertheless of importance as a contribution to existing knowledge; *Technical Memorandums,* consisting of information given limited distribution because of preliminary data, security classification, inclusion of proprietary information, or other reasons; *Contractor Reports,* presenting technical information, including classified or proprietary information requiring limited distribution, generated in connection with a NASA contract or grant and released under NASA auspices; *Technical Translations,* consisting of information published in a foreign language and considered to merit NASA distribution in English; *Technical Reprints,* providing additional distribution of information derived from NASA activities and initially published in the form of journal articles; and *Special Publications,* presenting information derived from or of value to NASA activities but not necessarily reporting the results of individual NASA-programed scientific efforts. These include conference proceedings, monographs, data compilations, handbooks, sourcebooks, special bibliographies, and certain publications of the Technology Utilization Division, described below.

NASA-supported scientific and technical documents are distributed without charge to NASA offices, centers, contractors, subcontractors, grantees, and consultants; other U.S. Government agencies and their contractors; libraries that maintain depositories of NASA documents in work related to the aerospace program; and foreign organizations that exchange publications with NASA, or that maintain depositories of NASA documents for public use. Automatic distribution in 53 specific subject categories is available to these users; requests for such distribution should be addressed to the Scientific and Technical Information Division.

Individuals or organizations not included in the above categories may purchase unclassified, unlimited NASA technical publications from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234.

NASA also publishes a semimonthly abstracting and indexing journal for report literature and supports one for books and journals.

Scientific and Technical Aerospace Reports (*STAR*) is a comprehensive abstracting and indexing journal covering worldwide report literature on the science and technology of space and aeronautics. It is published twice a month. Two major areas are covered in *STAR*: scientific and technical reports of NASA and its contractors; and scientific and technical reports of Government agencies, universities, and research organizations throughout the world. The first section of *STAR,* arranged by subject categories, contains informative abstracts and complete bibliographic citations. A second section consists of five indexes: subject corporate source, author, report number, and accession number. Separative cumulative indexes are published quarterly, semiannually, and annually. *STAR* is available without charge from the Scientific and Technical Information Division to NASA and its contractors, to other U.S. Government agencies and their contractors, and on exchange. It is for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

By special arrangment between NASA and the American Institute of Aeronautics and Astronautics, the AIAA publication *International Aerospace Abstracts* is issued in coordination with *STAR. IAA's* worldwide coverage of books and scientific journals complements *STAR's* worldwide report coverage. Each journal appears in alternate weeks. *IAA* uses subject categories identical with those in *STAR* and provides the same type of indexes. Because of NASA support, *IAA* is available to NASA and its contractors without charge. It may be purchased from the Technical Information Service, American Institute of Aeronautics and Astronautics, 750 Third Avenue, New York, N.Y., 10017.

Demand bibliographies are prepared by machine for NASA personnel, contractors, and grantees. These bibliographies are based on reports and formal publications announced in *STAR* and *IAA* and other documents in the NASA information system and are available to qualified requesters from the Scientific and Technical Information Division. A small number of continuing bibliographies are prepared on subjects of high interest to the aerospace community, such as aerospace medicine, and appear in the NASA *Special Publications* series.

Technology Utilization Division

National Aeronautics and Space Administration
400 Maryland Avenue SW.
Washington, D.C. 20546
Telephone: 693-6501 (Area code: 202)

This Division has been set up to locate, record, analyze, and disseminate to industry the useful results of NASA research and development so that they may be applied for commercial use. Innovations in devices, materials, processes, and techniques developed by NASA laboratories and contractors are reported in a variety of publications: *Technology Utilization Reports, Technology Handbooks, Technology Surveys, Technology Utilization Notes,* and *Tech Briefs.* These may usually be obtained by commercial organizations, trade media, and potential users by writing to the Technology Utilization Division, and are on sale through the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234.

NATIONAL AGRICULTURAL LIBRARY, *See* U.S. DEPARTMENT OF AGRICULTURE

NATIONAL AIR MUSEUM, *See* SMITHSONIAN INSTITUTION

NATIONAL ARCHIVES AND RECORDS SERVICE, *See* GENERAL SERVICES ADMINISTRATION

NATIONAL ASSOCIATION OF CORROSION ENGINEERS

980 M&M Building
Houston, Tex. 77002
Telephone: 224–6108 (Area code: 713)

The Association functions as a clearinghouse for worldwide information on corrosion control and related activities. It maintains a library and a large abstract collection pertaining to corrosion identification, detection, and prevention; noncorroding materials; economics of corrosion; and administration of corrosion control programs. The library and the abstract collection are available for on-site use without charge. Literature searches are performed, and photocopies sold.

Corrosion and *Materials Protection* are published monthly by the Association. *Corrosion Abstracts* is issued bimonthly. All are available on subscription.

NATIONAL ASSOCIATION OF DENTAL LABORATORIES, INC.

201 Mills Building
704 17th Street NW.
Washington, D.C. 20006
Telephone: 737–3441 (Area code: 202)

A trade organization, the Association acts as liaison for the dental laboratory industry in relations with the dental profession, its agencies, and Government agencies. Through a separate agency, the National Board for Certification in Dental Laboratory Technology, it establishes certification standards for dental laboratory technicians, reviews qualifications, and conducts examinations through the Psychological Corporation, a professional testing agency. In cooperation with other agencies in the dental profession and the dental laboratory industry, it has sponsored scholarships through the American Fund for Dental Education.

The Association furnishes statistical and analytical business data, maintains a register of speakers and clinics, and provides loans of books and package libraries through the facilities of the American Dental Association's Bureau of Library and Indexing Services. Certified dental technicians may borrow books or package libraries for a period of 2 weeks. There is no charge for borrowing books, but there is a rental fee for package libraries.

Publications available to members of the dental profession, the dental laboratory industry, health professions, libraries, and Government agencies include the *NADL Journal,* issued 12 times a year; the *Certified Dental Technician,* a technical periodical issued 4 times per year; a *Newsletter,* published 6 times per year; a *Clinics Register;* and a *Glossary of Dental Laboratory Nomenclature.*

NATIONAL AUDUBON SOCIETY

Audubon House
1130 Fifth Avenue
New York, N.Y. 10028
Telephone: 369–2100 (Area code: 212)

A nationwide association with many local affiliates, the Society maintains a library, issues publications, and is active in research, public education, and other activities concerned with various aspects of conservation. These include birds, wilderness and scenic resources, other renewable resources, nature centers, camps, sanctuaries, nature museums, natural history, soil conservation, water, forests, plants, insects, biological controls, pesticides, and mammals and other wildlife. The geographical coverage is international.

Most of the library collection is devoted to birds, conservation, general natural history, and related subjects. Ornithological magazines, including those published by branches and affiliates of the Society, constitutes a special collection. Although loan service is not available, reference service is provided without charge to members and the public during regular library hours. The Public Information Department handles mail and telephone inquiries from members and others seeking authoritative information.

Audubon Magazine, the official publication of the Society, appears bimonthly. *Audubon Field Notes,* a summary of the distribution of birds in the United States, Canada, and Alaska, is published six times a year. *Audubon Leader's Conservation Guide* is a biweekly newsletter sent to officers of the Society's branches and affiliated societies. It features legislative proposals and other Government activities of concern to conservationists. These periodicals may be obtained by subscription. Among other publications are the *Audubon Nature Bulletins* and *Audubon Nature Charts;* a list of titles is sent free on request.

NATIONAL BIOMEDICAL RESEARCH FOUNDATION

8600 16th Street
Silver Spring, Md. 20910
Telephone 587–7014 (Area code: 301)

A nonprofit association, the Foundation assists physicians and biologists in the application of high-speed digital computers in biological and medical research, and also works with computer-based retrieval systems. The Foundation is supported almost entirely through the Federal Government. Research results are published in technical reports, journal articles, and books. Reprints of articles are available free on request.

NATIONAL BUREAU OF STANDARDS, *See* U.S. DEPARTMENT OF COMMERCE

NATIONAL CANNERS ASSOCIATION

1133 20th Street NW.
Washington, D.C. 20036
Telephone: 338–2030 (Area code: 202)

The national office of this trade association comprises a research laboratory, a library, a public information office, a Consumer Service Division, an Economic and Statistical Research Division, a Fisheries Division, a Foreign Trade Division, and a Raw Products Division. The Association also has committees concerned with such special matters as taxes, markets, and labeling. Areas of interest are food canning, microbiology; spoilage prevention; containers standards; quality control; legal requirements regarding food; sanitation; home economics; food preparation and recipes; horticulture, fruits, and vegetables; soils; fertilizers; fungicides; and insecticides; raw products; economics; food statistics; meat and fish products.

Information is provided primarily, but not solely, to members of the Association. A consulting service is available whereby research personnel answer technical questions. It is unrestricted for scientists in related fields, but limited for others by the time and effort required.

Research Information, a state-of-the-art review, is published monthly. The weekly *Information Letter* gives Association news. A data handbook, *Canned Food Pack Statistics,* is issued annually.

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

High Altitude Observatory Library

Mail:
Post Office Box 1558
Boulder, Colo. 80301

Location:
900 24th Street
Boulder, Colo. 80302
Telephone: 444–1550 (Area code: 303)

The Observatory is operated by the University Corporation for Atmospheric Research for the study of astrophysics, with particular emphasis on solar planetary and interplanetary physics, and for the study of physics of the fluid envelope and magnetosphere of the earth. The Library's collection reflects this program in its material on astronomy, astrophysics, meteorology, radio astronomy, theoretical physics, electronics, and geophysics. There is a special collection of weather maps.

Use of facilities is available to scientific personnel of the University of Colorado or associated organizations and the graduate students in the Department of Astrophysics and Atmospheric Physics. Interlibrary loans are made.

NCAR Library

1420 30th Street
Boulder, Colo. 80302
Telephone: 443–1960 (Area code: 303)

The Library of the National Center for Atmospheric Research provides coverage in meteorology and relevant aspects of mathematics, physics, chemistry, geophysics, astrophysics, astronautics, aeronautics, electronics, biochemistry, geography, nuclear science, oceanography, limnology, meteorology, and thermodynamics. Its literature collection is assembled from worldwide sources and contains material in English, Russian, Italian, French, German, and Spanish. Reference and document services are provided without charge.

World Data Center A: Solar Activity

High Altitude Observatory
900 24th Street
Boulder, Colo. 80302
Telephone: 444–1550 (Area code: 303)

Operated by the High Altitude Observatory under the supervision of the National Academy of Sciences, this unit of World Data Center A acquires, abstracts, indexes, and compiles data on solar flares, plages, and prominences; magnetic fields on the sun; solar radio emission; and coronal intensities. The collection is open for direct use by visitors. Reference service is provided; some data are copied at cost.

The *Solar Activity Report Series,* issued quarterly since 1957, is available without charge.

NATIONAL CHIROPRACTIC ASSOCIATION

920 East Broadway
Glendale, Calif. 91205
Telephone: 244–3154 (Area code: 213)

The National Chiropractic Association maintains a library of books, journals, and reports on the human spine and related structures, anatomy and pathology of the spine; diagnosis of spinal ailments, relation of spinal pathologies to pathologies in other parts of the body, manipulative therapy and physiotherapy, and chiropractic theory and chiropractic management.

A bibliography service is available without charge to professional and scientific societies and their members, but a charge covering the actual cost is made for abstract service or photocopies. The Association initiated a retrieval system in 1963, which will provide information covering all phases of chiropractic research.

The *NCA Journal* and *Chiropractic Physician* are monthly journals published by the Association and the Los Angeles College of Chiropractic, respectively. Both are available by subscription.

NATIONAL COAL ASSOCIATION

Coal Building
1130 17th Street NW.
Washington, D.C. 20036
Telephone: 628–4322 (Area code: 202)

The Association serves as an information center in matters pertaining to the use of bituminous coal in any application. Material in the Association's collection of books, journals, reports, and nonprinted data cover such related factors as coal production, transportation, economics, legislation, standards, engineering and fuel technology, air pollution, and delivery and distribution of electric power.

Anyone with a scientific interest may contact the Association for free answers to brief technical questions. Document loans and photocopying services are provided at cost. Assistance through consultation is limited to cases requiring not more than 1 hour of staff members' time. The collection is accessible for on-site reference.

Coal Marketing News, which is published bimonthly, and *Coal Research,* published quarterly, are distributed free.

Bituminous Coal Research, Inc.

350 Hochberg Road
Monroeville, Pa. 15146
Telephone: 327–1600 (Area code: 412)

An affiliate of NCA, Bituminous Coal Research processes and analyzes material related to coal mining, preparation, combustion, and conversion; process and waste material uses; air and water pollution control; energy resources and use; and fuel engineering. BCR specialists will answer questions free, with preferred service given to Association members, Government representatives, and educators. The collection of books, journals, reports, patents, films and photos, maps and charts, nonprinted material, and other data is accessible for on-site reference and photocopies may be obtained without charge.

NATIONAL CONSTRUCTORS ASSOCIATION

Continental Building
1012 14th Street NW.
Washington, D.C. 20005
Telephone: 393–2757 (Area code: 202)

The Association collects, compiles, analyzes, and exchanges information relating to field labor and working conditions on construction jobs; design and construction of oil refineries, chemical plants, steel mills, powerplants, and other industrial facilities; industrial relations, especially as related to trade unions; and safety, particularly accident prevention. It provides information on the specialized problems connected with performance of foreign construction work by American engineering contractors. Brief inquiries from nonmembers are answered without charge.

NATIONAL COUNCIL ON THE AGING

49 West 45th Street
New York, N.Y. 10036
Telephone: 581–3800 (Area code: 212)

Through its library services and a staff of consultants in specialized fields, the Council aids communities and organizations to plan and carry out effective programs for older people. It has developed a national resource file of speakers, writers, and leaders in the field of aging. Consultation is provided by telephone, letter, and personal interview.

The Council has a library collection relating to an aging population, with emphasis on psychosocial, economic, and health aspects. Publications resulting from programs of business, Government, and voluntary organizations on local, State, and National levels are an important part of the collection.

Bibliographies in special areas of interest, loans, reference service, and facilities for study and research are provided for individuals, organizations, and libraries whose work requires information on aging.

Selected Acquisitions, a quarterly list, is a selection of both published and unpublished material pertinent to the field.

NATIONAL CRUSHED STONE ASSOCIATION

1415 Elliot Place NW.
Washington, D.C. 20007
Telephone: 333–1536 (Area code: 202)

A trade association of quarry operators, equipment manufacturers, and other suppliers who serve them, NCSA provides engineering research, evaluation, and consultation on the basic characteristics and quality of crushed stone, its use, and methods of testing. It provides reports and bulletins on legislative, engineering, labor, and other developments affecting the industry and the location of services or data.

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

155 East 44th Street
New York, N.Y. 10017
Telephone: 682–1500 (Area code: 212)

This trade association disseminates information, primarily through its publications, on standards for household appliances; lighting, signaling, and communications equipment; industrial apparatus; building equipment; insulating materials; wire and cable; and generation, transmission, and distribution equipment.

Questions are answered and nonproprietary information made available on request. Statistical data on production and marketing of electrical products are compiled, but requests for such data have to be made through personal visit to NEMA headquarters.

Your Guide to NEMA Standards Publications is available free on request.

NATIONAL FEDERATION OF SCIENCE ABSTRACTING AND INDEXING SERVICES

324 East Capitol Street
Washington, D.C. 20003
Telephone: 544–4678 (Area code: 202)

A national association of abstract-index journal publishers, the Federation is a source for information on the abstracting and indexing services in the United States. It also establishes industry standards. Reference services are provided as time and resources permit. There are no restrictions on services, but priority is given to nonprofit organizations. A sample collection of journals published by members of the Federation are available for on-site reference. Available for purchase are the *Annual Proceedings* of the Federation and *Guide to the World's Abstracting and Indexing Services in Science and Technology.*

NATIONAL FLUID POWER ASSOCIATION

227 South Main Street
Thiensville, Wis. 53092
Telephone: 354–7050 (Area code: 414)

A trade and technical association, NFPA is an information center for the fluid power industry regarding industry statistics, standards, practices, marketing, and management and educational services. It recommends fluid power standards to the American Standards Association and provides consulting, reference, and document services. Some data and materials are for use by members only; however, general economic data are available to others on request.

The Association prepares standards publications, technical reports on standards projects, conference proceedings, directories, and industrial sales indexes. *NFPA News,* issued monthly, is free to members.

NATIONAL GALLERY OF ART

Research Laboratory

c/o Mellon Institute
4400 Fifth Avenue
Pittsburgh, Pa. 15213
Telephone: 621–1100 (Area code: 412)

The Laboratory is staffed with specialists who give technical advice to the National Gallery of Art on paints, pigments, varnishes, physical testing, thermoplastic and other coatings, polymers, resins, solvents, papers, adhesives, metals, storage, illumination, and retouching. Inquirers can be referred by the Laboratory to professional restorers and analytical specialists.

Publications issued include technical abstracts on art and archeology, information bulletins, and a book, *On Picture Varnishes and Their Solvents.*

NATIONAL LEAD CO.

Baroid Division

2404 Southwest Freeway, Box 1675
Houston, Tex. 77001
Telephone: 524–6381 Extension 330 (Area code: 713)

A collection of books, journals, reports, patents on punched cards, data, Government documents, catalogs, and microfilms is maintained in the Baroid Division Library. Subject specialization is petroleum-mud fluids, corrosion, petroleum chemicals, well logging service technology, clay technology, earth sciences, barites, barium sulfate mining and geology, and drilling and production technology. There are special microfilm collections on descriptive geology of barite deposits throughout the world and on the worldwide distribution of nonmetallic deposits. Another special collection consists of journal articles, Company patents, and patents of others on the subject of drilling fluids for oil wells.

Use of materials may be made on the premises. Loans are made principally to members of the Special Libraries Association, commercial and industrial organizations in the fields of petroleum and mining who are not equipped with libraries of their own, and other organizations, societies, or agencies upon evaluation of requests received. Photocopying service is provided free to members of SLA and is available to others for a fee.

Publications issued by the Division are the *Semi-Annual Patent Report,* the *Baroid Product Announcement Data Book,* the *Baroid News Bulletin,* the *Baroid Mud Data Book,* and the *Baroid Reference Manual.*

Research Laboratories

Post Office Box 420
Wycoff Mills Road
Hightstown, N.J. 08520
Telephone: 448–3200 (Area code: 609)

The Laboratories maintain a library of books, journals, patents, and nonprinted material on chemistry, chemical technology, and metallurgy.

The library is not open to the public; nonproprietary material, however, is available for interlibrary loans.

Titanium Alloy Manufacturing Division

4511 Hyde Park Boulevard
Niagara Falls, N.Y. 14305
Telephone: 285–9304 (Area code: 716)

The Research Library of the Division supports work in the field of ceramics, dielectric materials, refractory metals, high-temperature refractories, zirconium, titanium, hafnium, and rare earths. Books, journals, reports, patents, films, and photos are acquired from English, Russian, Italian, Spanish, French, and German language sources.

Loan and photocopying services and on-site use of the material are available to noncompany personnel.

Titanium Division

Chevalier Avenue
South Amboy
Sayreville, N.J. 08872
Telephone: 721–1500 (Area code: 201)

The Division's Technical Department Library specializes in the technology of titanium, titanium pigments, and titaniferous ores, and the technology of single crystals. It consists of books, journals, patents, films, and photos drawn from English, Russian, Italian, French, and German language sources.

Material is primarily for use by company employees, but nonproprietatry material is available for interlibrary loan and for on-site reference to others by prior arrangement.

NATIONAL LIBRARY OF MEDICINE, *See* U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

NATIONAL METEOROLOGICAL CENTER, *See* U.S. DEPARTMENT OF COMMERCE. Weather Bureau.

NATIONAL MINERAL WOOL INSULATION ASSOCIATION

1270 Sixth Avenue
New York, N.Y. 10020
Telephone: 265–8171 (Area code: 212)

The efforts of this organization are concentrated in the field of electrical heating and in determining the effect of insulation on the sizing and operating cost of air-conditioning equipment. The Association headquarters serves as an information center on the use and effect of rock, slag, and glass-wool thermal insulation in structures.

Available literature holdings may be borrowed by professional groups without charge. Reference and technical interchange services are provided free. The Association publishes technical reports, state-of-the-art reviews, standards and specifications, data handbooks and data sheets, conference proceedings, and technical brochures. All publications are generally available at cost; limited numbers of copies are given without charge to technical and scientific personnel for their own use.

NATIONAL PAINT, VARNISH AND LACQUER ASSOCIATION

1500 Rhode Island Avenue NW.
Washington, D.C. 20005
Telephone: 462–6272 (Area code: 202)

A trade organization, the Association conducts laboratory research on the improvement of test methods and testing equipment for coatings, paints, pigments, lacquers, printing inks, resins, oils, solvents, plasticizers, and other products of the industry. The holdings of the Association's library consist of books, reports, a special collection of foreign language periodicals, and U.S. and foreign patents.

Data compilations, literature searches, state-of-the-art reviews, and patent searches are provided to members on request. Direct access to the collections can be obtained by others desiring to do their own research. There is a nominal charge for photocopying services.

Distributed only to members, but available for on-site use by others, are *Abstract Review,* issued monthly and containing abstracts from English, Russian, Italian, Spanish, French, and German sources arranged according to subject; the *Guide to U.S. Government Paint Specifications,* an abstract publication issued semiannually; *Raw Materials Indexes,* a compilation of data on the supply situation for five types of paint intermediates; and *Coatings,* a semi-monthly newsletter.

NATIONAL PARK SERVICE, *See* U.S. DEPARTMENT OF THE INTERIOR

NATIONAL PLANT FOOD INSTITUTE

1700 K Street NW.
Washington, D.C. 20006
Telephone: 296–3225 (Area code: 202)

The Institute is a trade association of manufacturers, importers, and brokers of chemical fertilizers. It maintains a film and slide library, and has a collection of journals dealing with fertilizers, soil fertility and plant nutrition, forest fertilization, transportation, safety, agriculture, and farm management.

Standard library reference service is not provided. Technical questions are answered either directly by staff members or by referral to other specialists and organizations, as time permits. Information is provided for use in the United States only. Technical inquiries should be directed to the Vice President for Agronomy and Agricultural Economics.

Plant Food Review, issued quarterly, is available by subscription.

NATIONAL REACTOR TESTING STATION

Technical Library

Post Office Box 2067
Idaho Falls, Idaho 83401
Telephone: 522–4400 Extension 2477 (Area code: 208)

Sponsored by the U.S. Atomic Energy Commission, the NRTS Technical Library maintains a collection of AEC research and development reports and books and periodicals principally in the fields of nuclear energy, physics, chemistry, metallurgy, and mathematics. Material is almost exclusively in English. The collection may be used on site by prior arrangement or items may be borrowed through interlibrary loan.

A small nuclear science reference collection, including *Nuclear Science Abstracts,* and a limited number of circulating items are maintained by the Idaho Falls Public Library, which may borrow other NRTS Library holdings for its users under an AEC community service program.

Publications provided free on request include the monthly *Library Bulletin,* the weekly *Reports Received List,* and *Technical Journals (including Annual Publications) at the NRTS,* a yearly cumulation.

NATIONAL REFERRAL CENTER FOR SCIENCE AND TECHNOLOGY, *See* LIBRARY OF CONGRESS

NATIONAL RESEARCH CORP.

Technical Information Center

70 Memorial Drive
Cambridge, Mass. 02142
Telephone: 354–5400 Extension 216 (Area code: 617)

The Center collects literature on refractory metals, powder metallurgy, vacuum technology and equipment, ultrahigh vacuum, metal coating, vacuum fusion, space simulation, superconductivity, and cryogenics. French and German publications are included.

By advance arrangement, materials may be used on site. Interlibrary loans of books, journals, and published reports are made.

NATIONAL SCIENCE FOUNDATION

The National Science Foundation is an independent Federal agency whose chief missions are sponsoring basic research, promoting improved science education, and fostering the exchange of scientific information. NSF does not itself conduct scientific research.

In addition to its annual reports and descriptive program brochures, NSF issues publications in such areas as science manpower and education, funding of research and development, dissemination of scientific information, and Federal scientific information activities. A publications list is provided on request.

Office of Antarctic Programs

National Science Foundation
Annex 1
1800 K Street NW.
Washington, D.C. 20550
Telephone: 343–6480 (Area code: 202)

The National Science Foundation has been designated as a clearinghouse and source of information for Antarctic records and documents. This service is provided without cost to scientists and others on application to the Office of Antarctic Programs of the Foundation.

Office of Economic and Manpower Studies

National Science Foundation
Annex 5
1321 H Street NW.
Washington, D.C. 20550
Telephone: 343–7981 (Area code: 202)

The Foundation also maintains the National Register of Scientific and Technical Personnel and conducts surveys on the funds and manpower utilized in the United States in the conduct of research and development. Information derived from these studies is incorporated in NSF publications and may be obtained from the publications or directly from the Foundation.

Office of Science Information Service

National Science Foundation
Annex 1
1800 K Street NW.
Washington, D.C. 20550
Telephone: 343–5935 (Area code: 202)

The Office of Science Information Service of NSF supports research and carries out activities in techniques for handling scientific information, including storage, retrieval, mechanical translation, linguistics, and abstracting and indexing; and the development of criteria for effective national information services. It publishes regular and occasional reports on the results of studies.

NATIONAL SLAG ASSOCIATION

613 Perpetual Building
1111 E Street NW.
Washington, D.C. 20004
Telephone: 638–2040 (Area code: 212)

The Association conducts and stimulates research in the field of mineral aggregates and their end products and in developing specifications and testing procedures for construction materials. Areas of investigation are slag production, properties, and processes; blast furnace residue from steel production; road surface and construction materials; concrete blocks; and agricultural uses of slag. A staff specialist answers correspondence by utilizing his own experience, files extending back to 1918, and reprints of pertinent releases or articles. Occasionally inquirers are referred to other specialists for specific information.

Services are available to anyone. There is no fee, except for certain documents and an occasional charge for extensive data compilations.

The annual *Slag Catalogue* is distributed free.

NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS

2023 West Ogden Avenue
Chicago, Ill. 60612
Telephone: 243–8400 (Area code: 312)

A nonprofit foundation made up of State and local affiliates, the Society sponsors a program of research, education, and care and treatment services for the rehabilitation of the handicapped. It maintains a library of books, journals, and reports on medical care; occupational, physical, and speech therapy, psychology; special education and equipment; rehabilitation centers; and employment.

The Society answers questions submitted by the general public, provides short bibliographic citations, and distributes on request educational packets of published materials on a specific subject. A consulting service provided by staff members trained in occupational and physical rehabilitation is restricted primarily, but not exclusively, to Society affiliates in program areas. Direct loans by mail and interlibrary loans are made to professional users. There are no fees.

Publications include state-of-the-art reviews; indexes and bibliographies; *Rehabilitation Literature,* a monthly abstract journal available on subscription; and *Employment Bulletin,* a directory of available positions issued quarterly without charge to registrants and professional schools. Research reports are prepared by the Easter Seal Research Foundation, an affiliate of the Society, located at the same address.

NATIONAL SOCIETY FOR MEDICAL RESEARCH

111 Fourth Street SE.
Rochester, Minn. 55901
Telephone: 288–1877 (Area code: 507)

The Society promotes public understanding of the use and care of animals in scientific research and of medical experiments involving human beings. It is concerned with the legal and ethical aspects of the use of cadavers, organ transplants, and autopsy procedures; with laws facilitating the donations of bodies and body parts for use in medical studies after death; and with the legality and morality of medical experiments on humans. It has collected journals, reports, and films and photos from English, Russian, Italian, Spanish, French, and German sources.

The information office of the Society answers questions and provides literature references. Legal counsel for medical and scientific institutions on specific problems and architectural advice on construction of laboratory animal facilities is also available.

Events Affecting Research Administration is issued monthly on controlled free distribution. The semiannual *Biomedical Purview* is available for purchase.

NATIONAL SOCIETY FOR THE PREVENTION OF BLINDNESS

16 East 40th Street
New York, N.Y. 10016
Telephone: 684–3505 (Area code: 212)

The Society disseminates information on causes of blindness, advances in treatment of eye disease, and general eye health and safety. Its library is open to the public for on-site reference, and films are available for loan. Consulting services are provided without charge.

Sight-Saving Review, issued quarterly, is obtainable on subscription. *POB News,* the quarterly *Wise Owl News,* and the *Annual Report* are free on request.

THE NATIONAL VITAMIN FOUNDATION, INC.

250 West 57th Street
New York, N.Y. 10019
Telephone: 582–1450 (Area code: 212)

The Foundation supports research on human nutrition and on vitamins. A book and journal collection is maintained for on-site use and single reprints of reports of Foundation-supported research are disseminated without charge. A list of available reprints is provided on request. No library reference services are available.

NATIONAL WEATHER RECORDS CENTER, *See* U.S. DEPARTMENT OF COMMERCE. Weather Bureau.

NATIONAL WILDLIFE FEDERATION

1412 16th Street NW.
Washington, D.C. 20006
Telephone: 232–8004 (Area code: 202)

A private, nonprofit conservation education organization with affiliates in the 50 States, the Federation maintains a library on wildlife management, fish and game management, natural resources, and organization of conservation groups. A vertical file includes all State conservation agency periodicals; journals are received regularly from foreign countries and are in Russian, Italian, Spanish, French, and German.

Questions are answered and reference service is provided for articles in books, journals, and reports. In some cases inquirers may be referred to appropriate U.S. Government agencies. Services are free. Legislative questions are not handled.

National Wildlife, published bimonthly, is available to associate members. *Conservation News,* a semimonthly journal, and *Conservation Report,* issued weekly during Congressional sessions, are free on request. The annual *Conservation Directory* may be purchased.

NATIONAL ZOOLOGICAL PARK, *See* SMITHSONIAN INSTITUTION

NATURAL RESOURCES INSTITUTE, *See* OHIO STATE UNIVERSITY

NATURAL RESOURCES RESEARCH INSTITUTE, *See* UNIVERSITY OF WYOMING

NEUROSCIENCES RESEARCH INFORMATION CENTER, *See* MASSACHUSETTS INSTITUTE OF TECHNOLOGY

NEVADA BUREAU OF MINES, *See* UNIVERSITY OF NEVADA

NEW MEXICO HIGHLANDS UNIVERSITY

Institute of Scientific Research

New Mexico Highlands University
Las Vegas, N. Mex. 00897
Telephone: 425–7511 (Area code: 505)

Supported largely by the National Institutes of Health and the National Science Foundation, the Institute conducts basic research in biochemistry and collects information on the physical-chemical properties of biological compounds and systems, the chemical and physiological properties of psychopharmacological compounds, and the thermophysical properties of heat storage materials. Subject coverage includes alkaloids, epoxides, nucleic acids, nuclear physics, reaction mechanisms, surface adsorption, thermodynamics, and trypanosome metabolism. Thermodynamic data are collected on punch cards; other holdings consist of journals, books, and reports. All major languages are represented.

The Institute answers technical questions, prepares bibliographies and data compilations, and provides consulting services. Services are performed principally in connection with current research projects. Charges are determined individually in each case. Materials are available for on-site use, and interlibrary loans are provided.

NEW MEXICO NURSES' ASSOCIATION

107 Stanford Drive SE.
Albuquerque, N. Mex.
Telephone: 243–5721 (Area code: 505)

An information service is maintained at the headquarters of this statewide professional association. It disseminates information on nursing education, inservice training, improvement in nursing skills, legislation, and economic security for professional nurses. Reference, consulting, and document services are provided to members and associates of the Association. General information is available as a courtesy to allied health organizations and the public.

The New Mexico Nurse, published quarterly, is distributed free to members and associates.

NEW YORK ACADEMY OF MEDICINE

2 East 103d Street
New York, N.Y. 10029
Telephone: 876–8200 (Area code: 212)

The library of the New York Academy of Medicine, an independent association of physicians, has a collection of close to 400,000 volumes and 150,000 unbound pamphlets and theses on medicine and its allied sciences, including dentistry, psychoanalysis, foods and cookery, nursing, chemistry, physics, and pharmacy. Holdings consist of reference works, including textbooks, encyclopedias, and indexes and systems; medical journals; reports; morbidity data and vital statistics; foreign monographs; microfilms; incunabula; museum pieces; autograph letters; and portraits of physicians. Language coverage is worldwide.

While open to the public, the library's collections are primarily for the use of physicians and scientists. Fellows, subscribers, and their representatives have borrowing privileges. Interlibrary loans are provided free to medical school libraries in New York City and to noncommercial libraries outside the city, and to other libraries on a subscription basis. Reference services are provided, queries by mail or telephone are answered, and a file is maintained of freelance workers who can provide translations, bibliographies, and editorial assistance. Order forms are required for photoduplication, except for requests by readers in the library. Charges vary according to the process requested.

Publications of the Academy are for sale in the library. An accession list is issued monthly without charge to Fellows.

NEW YORK ACADEMY OF SCIENCES

2 East 63d Street
New York, N.Y. 10021
Telephone: 838–0230 (Area code: 212)

The New York Academy of Sciences acts as a forum for scientists, serves as a depository for foreign publications received from learned and research institutions in 80 countries, and publishes scientific data. Its divisions and sections are concerned with the biological and medical sciences, anthropology, instrumentation, microbiology, psychology, chemical sciences, biochemistry, geological sciences, physical sciences, biophysics, engineering, mathematics, and planetary sciences.

Material collected is available for on-site reference. The Academy answers technical questions and provides consultation services without charge. The following publications are available for purchase: *Annals of the New York Academy of Sciences,* issued irregularly; *Monthly Program,* free to members; *Transactions of the New York Academy of Sciences,* issued eight times a year free to members; and special monographic studies. A list of publications is available free on request.

NEW YORK MICROSCOPICAL SOCIETY

c/o American Museum of Natural History
Central Park West at 79th Street
New York, N.Y. 10024
Telephone: 873–1300 (Area code: 212)

A library and information center, the Society has a collection of books, journals, reports, films and photos, data, and nonprinted material on all matters pertaining to the theory and application of microscopy, with emphasis on light microscopy but not excluding material on electron microscopy. The collection is designed to meet professional, industrial, and student interests in a range of subjects that includes biology, medicine, metallurgy, crystallography, textiles, chemicals, papers, foods, optics, and instrumentation.

Loans of books, other publications, slides, or equipment are made at the discretion of the Board of Managers. On-site use of microscope slides and equipment is generally required. Interested persons may attend lectures at the Society's regular meetings without charge. A *Yearbook* is issued, containing abstracts of technical papers presented at meetings as well as full texts of such papers.

NEW YORK PUBLIC LIBRARY

Fifth Avenue at 42d Street
New York, N.Y. 10018
Telephone: 695–4200 (Area code: 212)

Holdings of the Library's Science and Technology Division deal with aeronautics, astronautics, astronomy, automobiles, biochemistry, chemistry, communications, earth sciences, electricity, electronics, all branches of engineering, industrial arts, mathematics, metallurgy, mining, navigation, paper, petroleum, physics, plastics, radio, railroads, rubber, and science history. Material is in English, Russian, Italian, Spanish, French, German, Japanese, Dutch, Hungarian, Rumanian, Czech, Polish, Finnish, Swedish Danish, Norwegian, Portuguese, and Greek. The division has a complete set of those publications of the American Iron & Steel Institute that are not restricted to members and handles public inquiries for the Institute.

The collection is available for on-site use only; no loans are made. Material and reference services are provided only to persons above the high school student level. Short reference letters and telephone requests are answered. For a fee, staff members make retrospective literature searches on their own time. Photoduplicating services, including microfilm copies, are available at cost.

New Technical Books, issued 10 times a year, is available by subscription.

NEW YORK UNIVERSITY

New York University Libraries

100 Washington Square East
New York, N.Y. 10003
Telephone: 777–2000 (Area code: 212)

The New York University library system provides facilities for study and research in medicine, dentistry, law, business administration, life sciences, physical sciences, and engineering. All major languages are represented. The collection consists of both printed and nonprinted material, from all possible sources, and is disposed in various locations in the New York City area according to the site of the professional college of the University relevant to the particular subject area.

This information resource is for the use of the students, faculty, and staff of the University. Others desiring on-site reference use or interlibrary loan service should apply to the librarian in charge of the particular subject area.

Project SETE

College of Engineering
New York University
Research Division, Building 2
401 West 205th Street
New York, N.Y. 10034
Telephone: 584–0700 Extension 496 or 497 (Area code: 212)

Sponsored by the Department of Defense, Project

SETE (Secretariat for the Electronic Test Equipment Coordination Group) collects and tabulates information from company brochures and journal clippings on both military and commercial electronic test, checkout, and support equipment; monitoring equipment; calibration devices; missile and system checkout; simulators for tests; and new measurement techniques. It maintains a file of available equipment alphabetically by manufacturer and a nomenclature test equipment card file.

SETE provides answers to technical questions, makes technical evaluations, and prepares state-of-the-art reviews, correlations of information, and tabulations of data. Limited technical consultant services are available. All services are provided without charge; they are available only to Government personnel and their contractors, or prospective contractors.

NEW YORK ZOOLOGICAL SOCIETY

630 Fifth Avenue
New York, N.Y. 10020
Telephone: 581–1443 (Area code: 212)

Zoological Park

Bronx Park
Bronx, N.Y. 10460
Telephone: 933–1500 (Area code: 212)

New York Aquarium

The Boardwalk at West Eighth Street
Brooklyn, N.Y. 11224
Telephone: 266–8500 (Area code: 212)

The New York Zoological Society maintains a zoo and an aquarium with living collections of amphibia reptilia, aves, mammalia, osteichthyes, choanichthyes, and certain invertebrates.

The Society's library at the zoo contains literature, photo, and film collections which are accessible for on-site use without charge. Films and photos may be borrowed for a fee. Charges for consulting services are individually evaluated; these services are free to public institutions.

Zoologica, issued quarterly, and the semipopular *Animal Kingdom,* published bimonthly, are available on subscription.

NOAH WORCESTER DERMATOLOGICAL SOCIETY, INC.

Department of Dermatology
Cincinnati General Hospital
Burnet Avenue
Cincinnati, Ohio 45229
Telephone: 861–3100 (Area code: 513)

The Society provides the medical profession with information on the diagnosis, treatment, and history of dermatology. This activity is supported by a library of books, journals, reports, films and photos, and data in English, Russian, Italian, Spanish, French, and German. Consulting and document services are furnished without charge.

NOPCO CHEMICAL CO.

First and Essex Streets
Harrison, N.J. 07029
Telephone: 484–8400 (Area code: 201)

To support its research and development program, the Company maintains a library on industrial, organic, textile, paper, and leather chemistry; related technologies; surface active agents; polyurethane resins; animal and poultry nutrition; dairy products; and vitamins. Foreign source material is in Russian, French, and German.

Resources are primarily for the personnel of Nopco Chemical Co., and its subsidiaries. Interlibrary loans are made.

NORFOLK BOTANICAL GARDEN

Airport Road
Norfolk, Va. 23518
Telephone: 855–3340: 855–3349 (Area code: 703)

Sponsored by the Norfolk Department of Parks and Recreation, the Norfolk Botanical Garden maintains a library and information center dealing with horticulture, plant propagation, and related subjects. Species include hundreds of varieties of camellias, azaleas, rhododendron, and other plants. Plants are tested climatically in collaboration with the U.S. Department of Agriculture.

Reference service is available to the general public without charge, but books and documents must be used on the premises. Only staff members have loan privileges. Answers to technical questions from the public are provided without charge.

The Botanical Garden Society publishes a *Monthly Bulletin on General Gardening for the Tidewater, Virginia, Area,* which is available at a subscription rate which includes associate membership in the society. *Bulletins* are also available on subscription, which includes active membership in the society.

NORRIS METALLURGY RESEARCH LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

NORTH AMERICAN AVIATION, INC.

Atomics International

8900 Desoto Avenue
Canoga Park, Calif. 91304
Telephone: 341–1000 (Area code: 213)

The Company's laboratory maintains a library in the physical sciences, chemistry, and mathematics, with specialization in nuclear physics and reactor technology and engineering. The collection consists of literature in all major languages and includes books, journals, reports, films and photos, data, and maps and charts. Library services are available primarily to company personnel. The laboratory performs tests and analyses for others on a fee or contract basis.

Mossbauer Effect Data Group

North American Aviation Science Center
1049 Camino Dos Rios
Thousand Oaks, Calif. 91360
Telephone: 498–4545 (Area code: 805)

This information service searches and analyzes books and journals and compiles punched card data files on the Mossbauer effect. Data are used for the preparation of the *Mossbauer Effect Data Index,* issued at least once a year, which contains a current bibliography of all published, open-literature results in the field and an index to published experimental data. The *Index* is available without charge to institutions and groups working in the field. Use of the original punched card data files is possible by special arrangement.

NORTH DAKOTA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE

Herbarium

State University Station
Fargo, N. Dak.
Telephone: 235–6411 (Area code: 701)

Established to preserve specimens of native and naturalized plants of North Dakota, the Herbarium compiles data to show distribution and changes and supplies information on the identification and economic value of the plants. Arrangements may be made for consultations and for the loan of specimens to educational institutions and bona fide researchers. No fees are charged.

North Dakota Agricultural Experiment Station

State University Station
Fargo, N. Dak.
Telephone: 235–6411 (Area code: 701)

The Station conducts research in agriculture, particularly as applied to the local region. A literature collection is accessible for on-site use. Technical inquiries are answered, and consulting services rendered to a degree consistent with the needs of the State and the industry and the qualifications of personnel. No fees are charged.

Publications include *Farm Research,* issued bimonthly, and bulletins in a numbered series. Single copies are available without charge.

THE NORWICH PHARMACAL CO.

Scientific Information Division

Post Office Box 191
Norwich, N.Y. 13815
Telephone: 334–9911 (Area code: 607)

The Division maintains a reference library relating to nitrofurans and pharmaceutical and biomedical subject matter. Information services are restricted to scientists employed and affiliated with the Company. However, questions regarding nitrofurans will be answered unless the inquiry deals with proprietary aspects.

NUCLEAR METALS, INC.

Post Office Box 125
West Concord, Mass. 01781
Telephone: 369–5410 (Area code: 617)

A division of Textron, Inc., and sponsored by the U.S. Atomic Energy Commission and the U.S. Department of Defense, Nuclear Metals through its research and development activities can provide information to private industry on materials research and development, primarily in the field of metallurgy. It collects information from its own projects and from projects of other research and development organizations in the United States and abroad. Holdings consist of reports, books, journals, patents, films, and photos, data, and nonprinted material on various aspects of nuclear technology, principally reactor engineering and technology, and high-temperature materials and refractory metals, as well as related areas of chemistry and chemical engineering. Foreign literature includes material in Russian, French, German, and Polish.

Consulting, reference, and document services are provided on a limited basis. Access to the collections is governed by patent and security requirements. Extra copies of original documents are distributed in accordance with the above restrictions. Technical reports and conference proceedings are issued.

NUCLEAR SAFETY INFORMATION CENTER, *See* OAK RIDGE NATIONAL LABORATORY

NUCLEAR SCIENCE CENTER, *See* LOUISIANA STATE UNIVERSITY

OAK RIDGE GASEOUS DIFFUSION PLANT

Union Carbide Corp., Nuclear Division
Post Office Box P
Oak Ridge, Tenn. 37831
Telephone: 483-8611 Extension 8264 (Area code: 615)

Operated by the Union Carbide Corporation, Nuclear Division, under contract with the U.S. Atomic Energy Commission, the Oak Ridge Gaseous Diffusion Plant is a production facility, with concomitant research activities, for the separation of isotopes and development of associated technology.

The library holdings of the plant consist of a basic collection in the physical and mathematical sciences, principally in the fields of chemistry, physics, engineering, metallurgy, mathematics, and statistics. Special emphasis is placed on stable isotope separation methods, fluorine chemistry, mass spectroscopy, metallic and nonmetallic materials, corrosion, instrumentations, fluid mechanics, and industrial management. Literature and data are acquired from all major language sources.

Materials are available for loan in accordance with USAEC security regulations and the ALA interlibrary loan code. Staff services, such as searching, are restricted to on-site users.

OAK RIDGE INSTITUTE OF NUCLEAR STUDIES

Post Office Box 117
Oak Ridge, Tenn. 37831
Telephone: 483-8411 Extension 208 (Area code: 615)

The Institute is a nonprofit educational corporation of southern universities and colleges formed for participation in and support of the national nuclear-energy program. Operating under contract with the U.S. Atomic Energy Commission, the Institute administers educational and research programs from the secondary-school to the postdoctoral level. Its library is a depository for AEC documents, including nonclassified reports and translations; the collection covers most of the material cited in *Nuclear Science Abstracts*. The books and journals in the library cover nuclear science, medicine, mathematics, physics, life sciences, engineering and technology, chemistry, and agriculture.

The library is open to the public, but only Oak Ridge residents have borrowing privileges. Service to out-of-town residents is restricted to requests channeled through libraries. Such requests should only be made after local resources have been consulted. Photocopies in lieu of loan may be supplied at the discretion of the library.

OAK RIDGE NATIONAL LABORATORY

Operated by the Union Carbide Nuclear Co., under contract with the U.S. Atomic Energy Commission, the Oak Ridge National Laboratory is a research center concerned with physical and biomedical research and reactor development and technology.

Charged-Particle Cross Section Information Center

Oak Ridge National Laboratory
Post Office Box X
Oak Ridge, Tenn. 37831
Telephone: 483-8611 Extension 6461 (Area code: 615)

The "best values" of the cross sections for charged-particle induced reactions are compiled by the Center from the published literature and presented in tabular form and graphical form with the gridlines reproduced. In scope, the compilation includes cross section data at all energies for nuclear reactions of the type A(x,y)B, where $M_x \geqq$ are nucleon mass. Nuclear reactions involving mesons in the exit channel are not included. Data on elements manganese through uranium are now being compiled for publication, after which material on the light elements will be brought up to date for new editions of two reports issued by the Los Alamos Project. One of these reports, LA-2424, is available for purchase from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234. A section of the compilation, ORNL–CPX–1, for the elements Mn, Fe, and Co is ready for distribution.

Internal Dose Information Center

Oak Ridge National Laboratory
Post Office Box X
Oak Ridge, Tenn. 37831
Telephone: 483–8611 Extension 6–1423 (Area code: 615)

The primary function of the Center is the revision and updating of recommendations of the International Commission on Radiological Protection and the National Commission on Radiological Protection concerning radioactive materials that may enter the body. Particular emphasis is given to parameters related to intake, deposition, retention, and elimination of radioactive contaminants that enter the body by inhalation or ingestion under conditions that are typical of occupational exposure or exposure of a population.

Information services are available to scientists and those professionally concerned with the estimation of dose from radioactive materials in the body, particularly any individual or agency supported by the U.S. Government.

Nuclear Safety Information Center

Oak Ridge National Laboratory
Post Office Box Y
Oak Ridge, Tenn. 37831
Telephone: 483–8611 Extension 7253 (Area code: 615)

Established to serve the nuclear community by collecting, storing, evaluating, and disseminating nuclear safety information generated throughout the world, the Center's interests are concentrated in six specific areas: Containment of nuclear facilities; fission-product release, transport, and removal; meteorological considerations; nuclear instrumentation, control, and safety systems; radioactive effluent control, monitoring, movement, and dosage; and reactor transients, kinetics, and stability. The Center maintains a reference file, indexed in depth, of all information in the above areas, and has its own library of uncirculated documents, such as reactor safeguards reports.

The Center's reference and consulting services are available without charge to Government agencies, research and educational institutions, and the nuclear industry. Security clearance is required for access to classified documents, although such material constitutes less than 5 percent of the information processed. Requests for information may be made in person, by correspondence, or by telephone. Arrangements for a visit should preferably be made 1 week in advance. Written requests should be addressed to the Director.

Nuclear Safety, a quarterly technical progress review prepared by the Center, is available for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C., 20402. No purchase or loans of reference documents are handled by the Center. However, topical reports prepared by NSIC on selected subjects are free of charge. In addition, a periodic bibliography is being initiated for free distribution.

Oak Ridge National Laboratory Library

Post Office Box X
Oak Ridge, Tenn. 37831
Telephone: 483–8611 Extension 6836 (Area code: 615)

The Library's collection consists of books, journals, reports, and some 20,000 full-size translations in nuclear science and engineering, chemistry, physics, mathematics, metallurgy, and biological sciences. Literature in all major languages is represented.

The Library is open to qualified representatives of industrial or educational organizations. Reference, document, and interlibrary loan services are available.

Radiation Shielding Information Center

Oak Ridge National Laboratory
Post Office Box X
Oak Ridge, Tenn. 37831
Telephone: 483–8611 Extension 6944 (Area code: 615)

The Center evaluates and disseminates information related to techniques of calculation and measurement of the radiation environment of nuclear reactors, accelerators, space, and nuclear weapons. It collects appropriate computer codes and maintains an archival file of shielding literature in microfiche form. Sources in all major languages are used.

Reference and consulting services are available to bona fide professional scietnists and engineers. Security clearance is required for access to classified information.

Research Materials Information Center

Oak Ridge National Laboratory
Post Office Box X
Oak Ridge, Tenn. 37831
Telephone: 483–8611 Extension 6–1287 (Area code: 615)

The Center collects, organizes, and encodes in an automated storage and retrieval system technical papers and data sheets on the type, form, purity, research interest, special characteristics, and availability of high-purity inorganic solid state research materials, including metals, alloys, semiconductors, compounds, elements, laser and maser materials, and refractories. Structural materials, devices, and radioactive isotopes are not included. A companion listing is made of research materials that are not available, but are desired by various investigators. Data and papers are acquired directly from research groups and through a continuing literature search.

No purchases, loans, or exchanges of materials are handled by the Center. Only information on properties of materials is provided. Such information is furnished in the form of photocopies of the first pages of pertinent papers or reports, with inclusion of selected pages containing graphs or tabulations of requested data. Use of the coded microfilm collection is available to visitors. Entire papers and reports may be scanned. There is no charge for or restriction on the use of services.

Aperiodic bulletins, containing up-to-date lists of materials produced and desired and special articles on specific materials, are available free on request.

OFFICE OF TECHNICAL SERVICES, *See* U.S. DEPARTMENT OF COMMERCE, NATIONAL BUREAU OF STANDARDS

OHIO AGRICULTURAL EXPERIMENT STATION

Wooster, Ohio 44694
Telephone: 263–0010 (Area code: 216)

Operated as an agency of the State of Ohio and partially supported by Federal funds, the Station conducts research across a broad range of subject matter relating to agricultural production and agribusiness, including agricultural biochemistry, agricultural economics and rural sociology, agricultural engineering, agronomy, animal science, botany and plant pathology, dairy science, dairy technology, forestry, home economics, horticulture, poultry science, veterinary science, and zoology and entomology. A library of books, journals, periodicals, and documents numbering some 40,000 volumes relating to these subjects is maintained. In addition, the Institute of Acarology maintains a special reference collection of abstracts on the acarids. The holdings are available for on-site reference use.

Results of research are reported in research bulletins and circulars, special circulars, departmental series, and progress reports. *Farm and Home Research,* a bimonthly publication, presents research findings in popular form. A complete listing of literature published each year is included in the Station's *Annual Report*. Copies of all publications are distributed to libraries on an exchange basis. Single copies are available to individuals without charge or at publishing cost. A publications list will be sent upon request.

OHIO BIOLOGICAL SURVEY, *See* OHIO STATE UNIVERSITY

OHIO COOPERATIVE WILDLIFE RESEARCH UNIT, *See* OHIO STATE UNIVERSITY

OHIO STATE UNIVERSITY

Unless otherwise indicated, the libraries listed below are open to the public for reference use. Direct loans of materials are made only to the faculty, staff, and registered students of the University, but interlibrary loan services are available.

Aeronautical-Civil Engineering Library

Ohio State University
2036 Neil Avenue
Columbus, Ohio 43210
Telephone: 293–6279 (Area code: 614)

The Library has a collection of books, journals, reports, and maps on all aspects of aeronautical and civil engineering, including sanitary engineering, aviation, and aerospace engineering. Foreign literature is collected in Russian, Italian, Spanish, French, and German. Reference and document services are provided.

Agriculture Library

Ohio State University
2120 Fyffe Road
Columbus, Ohio 43210
Telephone: 293–6125 (Area code: 614)

Holdings consist of books, journals, and reports on agricultural biochemistry; poultry and animal science; agricultural administration, economics, and education; and dairy science and technology. Foreign languages represented are Russian, Italian, Spanish, German, and French.

Antenna Laboratory Library

Ohio State University
2024 Neil Avenue
Columbus, Ohio 43210
Telephone: 293–6191 (Area code: 614)

A reference resource for the Antenna Laboratory, the Library collects literature on electromagnetic theory, antennas, radio propagation, communications data processing, computers, controls, electronic systems, quantum electronics, astronautics, and lasers. Foreign sources are in Russian, Japanese, French, and German. The Library is primarily for internal use. Technical reports, conference proceedings, data handbooks, and bibliographies prepared by the Laboratory are distributed at the discretion of the sponsor.

Botany and Zoology Library

Ohio State University
1735 Neil Avenue
Columbus, Ohio 43210
Telephone: 293–2245 (Area code: 614)

The Library has books, journals, and reports on botany, zoology, entomology, wildlife, plant pathology, insect control, and conservation. These are special collections on spiders, plant pathology, gall insects, bryozoa, and plant ecology and physiology. Material is in English, Russian, Italian, Spanish, French, and German.

Brown Hall Library

Ohio State University
190 West 17th Avenue
Columbus, Ohio 43210
Telephone: 293–6406 (Area code: 614)

The collection of books, journals, and reports covers all phases of architecture, including engineering drawing, photography, landscape architecture, and city and regional planning. Foreign literature is in Russian, Italian, Spanish, German, and French.

Charles Cutter Sharp Library of Chemistry

Ohio State University
140 West 18th Avenue
Columbus, Ohio 43210
Telephone: 293–6886 (Area code: 614)

A reference source for the Chemistry Department, the Library collects books, journals, and reports on chemistry, chemical technology, chemical engineering, and petroleum. Sources are in English, Russian, Italian, Spanish, French, and German.

Cole Memorial Library of Physics

Ohio State University
174 West 18th Avenue
Columbus, Ohio 43210
Telephone: 293–2327 (Area code: 614)

The Library's collection of books, journals, and reports pertains to all aspects of physics, including solid state physics, theoretical physics, mathematics, astrophysics, infrared spectroscopy, low-temperature physics, and nuclear physics. There is also a literature collection on astronomy. Foreign sources are in Russian, Italian, Spanish, French, and German.

Davis Welding Library

Ohio State University
190 West 19th Avenue
Columbus, Ohio 43210
Telephone: 293–6706 (Area code: 612)

The collection consists of books, journals, reports, and patents on welding, industrial engineering, engineering mechanics, industrial safety, plant layout, machinery, management, and arbitration. There is a special collection of James F. Lincoln Award Program papers. Material is collected in English, Russian, Italian, Spanish, French, and German.

Electrical Engineering Library

Ohio State University
2024 Neil Avenue
Columbus, Ohio 43210
Telephone: 293–2852 (Area code: 614)

A reference resource for the Department of Electrical Engineering, the Library has a collection of books, journals, and reports on electrical engineering and related areas, including communications, illumination, acoustics, circuit analysis, electromagnetic theory, physics, mathematics, and mechanical engineering. Foreign sources are in Russian, Italian, Spanish, German, and French.

Health Center Library of Medicine

Ohio State University
1645 Neil Avenue
Columbus, Ohio 43210
Telephone: 293–5246 (Area code: 614)

Topaz Library in Vision

338 West 10th Avenue
Columbus, Ohio 43210
Telephone: 293–2647 (Area code: 614)

Children's Hospital Library

561 South 17th Street
Columbus, Ohio 43205
Telephone: 253–7441 Extension 268 (Area code: 614)

The Health Center Library has a collection of books, journals, and reports on clinical and experimental medicine, dentistry, nursing, optometry, and opthalmology. Material on basic medicine and pediatrics is acquired by the Children's Hospital Library; the

Topaz Library in Vision has holdings on ophthalmology, optics, reading psychology, and visual psychology. Foreign literature at each of the libraries include material in Russian, Italian, Spanish, French, and German. Reference and document services are provided.

Institute for Research in Vision

Ohio State University
1314 Kinnear Road
Columbus, Ohio 43212
Telephone: 293–6265 (Area code: 614)

The Institute conducts research and collects information on the physiology of the eye and vision. Areas of interest include blinding eye diseases, retinal biochemistry, retinal anatomy, retinal electrophysiology, psychophysics, interior lighting, highway and automobile lighting, atmospheric optics, photographic and electronic documentation of the atmosphere, and the development of simulators for testing visual performance. The Institute also establishes standards and specifications for lighting. Holdings consist of books, journals, reports, and data. Material is collected in English, French, and German.

The collection is available for direct use by researchers. Consulting services are provided on a contract basis. Reports, conference proceedings, standards and specifications, data handbooks, and bibliographies issued by the Institute may be purchased.

Institute of Polar Studies

Ohio State University
125 South Oval Drive
Columbus, Ohio 43210
Telephone: 293–6531 (Area code: 614)

The Institute of Polar Studies conducts investigations in the polar regions of the earth, particularly the Antarctic ice cap, the Glacier Bay area of southeast Alaska, and southwest Greenland. Areas of interest include glaciology-geophysics, bedrock geology, glacial geology, climatology, lichenology, bacteriology, phycology, and soil movement studies. Books, journals, reports, maps, and data are acquired on all aspects of polar research. There is a special collection of IGY glaciological record sheets for Greenland and the Antarctica and a collection of color slides of Greenland, Alaska, and Antarctica. Foreign literature includes material in Russian, Japanese, Italian, Spanish, French, and German.

Brief questions from the general public are answered free. The collection is accessible for direct use by approved visitors. Reports issued by the Institute are distributed to scientific personnel and exchanged with other libraries.

Lord Hall Library

Ohio State University
124 West 17th Avenue
Columbus, Ohio 43210
Telephone: 293–6168 (Area code: 614)

Holdings consist of books, journals, and reports on mining, metallurgy, mineralogy, ceramics, and petroleum engineering. Foreign source materials are in Russian, Italian, Spanish, French, and German.

Main Library

Ohio State University
1857 Neil Avenue
Columbus, Ohio 43210
Telephone: 293–6151 (Area code: 614)

The Main Library has books, journals, reports, patents, films and photos, maps and charts, and nonprinted material in all degree program areas of the university. There are special collections on the history of medicine and U.S. patent specifications. Foreign literature includes material in Russian, Italian, Spanish, French, and German. Publications are exchanged with the Ohio Academy of Science, the Ohio State University Scientific Association, and the Ohio Biological Survey. Reference and document services are provided.

Mathematics Library

Ohio State University
231 West 18th Avenue
Columbus, Ohio 43210
Telephone: 293–2009 (Area code: 614)

A reference source for the Department of Mathematics, the Library has books, journals, and reports on pure and applied mathematics. Foreign literature is in Russian, Italian, Spanish, French, and German.

Natural Resources Institute

Ohio State University
1885 Neil Avenue
Columbus, Ohio 43210
Telephone: 293–2001 (Area code: 614)

A clearinghouse for information for Government and other public agencies concerning conservation programs conducted by the University, the Institute collects books and reports on botanical and zoological subjects, ecology, the economics of resources, wildlife resources and conservation, soil erosion and control, environmental sanitation, water-supply engineering, sewerage, and industrial wastes treatment. There is a special collection on conservation education. Foreign literature includes material in Russian, Italian, Spanish, French, and German. The collection is available for direct reference use by faculty members, representatives of State, Federal, and private agencies, and graduate students. Interlibrary loan services are provided.

Ohio Biological Survey

Ohio State University
1885 Neil Avenue
Columbus, Ohio 43210
Telephone: 293-2001 (Area code: 614)

Operated by the Natural Resources Institute of Ohio State University as an interinstitutional program among Ohio colleges and universities, the Ohio Biological Survey conducts research and collects data on Ohio flora and fauna. The collection is open to researchers. Results of research studies are published in a numbered series of reports bearing the general title, *Bulletins of the Ohio Biological Survey*, and in a multilith series, entitled *Ohio Biological Survey Notes*. These studies are distributed free to members of the program and are exchanged with research institutions on a worldwide basis; others may purchase them at cost.

Ohio Cooperative Wildlife Research Unit

Ohio State University
1735 Neil Avenue
Columbus, Ohio 43210
Telephone: 293-6112 (Area code: 614)

Sponsored by Federal and State agencies, the Ohio Cooperative Wildlife Research Unit collects information on wildlife, particularly diseases and parasites and wildlife management, ecology, forestry and other natural resources, insecticides, and herbicides. A special area of interest is the development of tracer techniques to evaluate insecticide effects on the ecology of natural environments. Holdings consist primarily of journals and technical and scientific data, but include books and reports. The Unit maintains a reprint file of published data on wildlife research.

Technical questions are answered and technical consulting services are provided without charge, subject to time limitations. Literature searches prepared by students are provided at cost. Services to researchers in the field include document loans and access to reprint files.

Two periodic reports are prepared by the Unit: The *Ohio Cooperative Wildlife Research Unit Quarterly Report* and the *Annual Report*; the latter contains reprints of published research projects.

Orton Memorial Library of Geology

Ohio State University
155 South Oval Drive
Columbus, Ohio 43210
Telephone: 293-2428 (Area code: 614)

A reference resource for the Department of Geology, the Library collects books, journals, and reports on geology, geodetic science, and paleontology. There are special collections of Ohio Geological Survey exchange serials, material on polar research, State and Government documents in geology and allied fields, geologic maps, and U.S. Geological Survey topographic maps. Foreign literature includes material in Russian, Italian, Spanish, French, and German.

Pharmacy and Microbiology Library

Ohio State University
1958 Neil Avenue
Columbus, Ohio 43210
Telephone: 293-6078 (Area code: 614)

The collection consists of books, journals, and reports on pharmacy, including pharmaceutical chemistry, pharmacology, pharmacognosy, bacteriology, and microbiology. Languages represented are English, Russian, Italian, Spanish, French, and German.

Veterinary Medicine Library

Ohio State University
1900 Coffey Road
Columbus, Ohio 42210
Telephone: 293-6107 (Area code: 614)

The Library has books, journals, and reports on veterinary anatomy, physiology, pharmacology, parasitology, medicine and preventive medicine, surgery, and radiology. Foreign source materials are in Russian, Italian, Spanish, French, and German.

OLIN MATHIESON CHEMICAL CORP.

Olin Research Center

275 Winchester Avenue
New Haven, Conn. 06711
Telephone: 777-7911 (Area code: 203)

In support of its arms and ammunition, chemicals, metals, organics, and packaging research and development programs, the Center acquires published and unpublished material in these subject areas from U.S. and foreign sources.

Access to the collection and to reference services are limited to Corporation personnel. However, special inquiries relating to the science and technology of Corporation products or potential products are answered.

Squibb Institute for Medical Research

Georges Road
New Brunswick, N.J. 08902
Telephone: 545–1300 (Area code: 201)

To serve its drug research, production, and distribution activities, the Institute maintains a collection of books, journals, reports, patents, films and photos, maps and charts, data, and nonprinted material drawn from English, Russian, Italian, Spanish, French, and German sources.

Reference, consulting, translating, and document services are limited to Corporation personnel, but special inquiries relating to the science and technology of Corporation products or potential products are answered.

O'NEILL GEOTHERMAL, INC.

410 West Ohio Street
Midland, Tex. 79704
Telephone: 683–2771 (Area code: 915)

This commercial company has accumulated experience and files of information on exploring for, drilling for, and producing oil, gas, and geothermal energy. Consulting service is offered; the availability of information depends on the source of the request.

OPTICAL SOCIETY OF AMERICA

1155 16th Street NW.
Washington, D.C. 20036
Telephone: 374–6177 (Area code: 202)

A member society of the American Institute of Physics, the Society maintains an information center for scientists and engineers working in theoretical or applied optical physics. The scope of this service is optics in all its branches: Spectroscopy; physical, geometrical, and physiological optics, including applications; and color vision. Questions from the public are answered directly or referred elsewhere.

Monthly publications issued by the Society which may be obtained by subscription are the *Journal of the Optical Society of America; Applied Optics;* and *Optics and Spectroscopy,* the English translation of the Russian journal *Optika i Spektroskopiya.*

OWENS-CORNING FIBERGLAS CORP.

Technical Center
Granville, Ohio 43023
Telephone: 582–0610 (Area code: 614)

Organized to support the research activities of its laboratories, the Corporation maintains a library of books, journals, reports and patents in glass composition and melting, fibrous glass, and reinforced plastics. Foreign literature is collected in Russian, French, and German. The library is primarily for internal use; information needs of others are considered on an individual basis.

OWENS-ILLINOIS GLASS CO.

Technical Center and Research Library

1700 North Westwood Avenue
Toledo, Ohio 43607
Telephone: 242–6543 Extension 33–210, 33–258, and 33–562 (Area code: 419)

The Library supports Company research on glass, forest products, and plastics through its collection on glass technology, physics, chemical engineering, temperature measurement and control, heat transfer, metallurgy, plastics, and paper products. Pertinent periodicals originating in the United States, England, France, Belgium, Italy, Germany, Czechoslovakia, Japan, Russia, and India are acquired.

Information services are primarily for Owens-Illinois personnel. However, with permission, outsiders may use the Library during regular working hours. Interlibrary loans are made of books, pamphlets, translations, and bound periodicals. Company reports are available only to Company personnel.

The semimonthly *Research Library Bulletin* and the bimonthly *Abstracts of Technical Reports* are published by the Research Library.

PACIFIC AEROSPACE LIBRARY

7660 Beverly Boulevard
Los Angeles, Calif. 90036
Telephone: 931–1895 (Area code: 213)

Under sponsorship of the American Institute of Aeronautics and Astronautics, the Pacific Aerospace Library acquires and disseminates material on aerospace, aeronautics, and astronautics. Holdings include books, journals, technical reports, microfiche, magazines, abstracts, indexes, and reprints.

Since the Library is a cooperative subscription library for industry, it is open only for on-site reference use to nonsubscribers. Brief answers to technical inquiries and short lists of literature citations are provided. The Library also furnishes assistance in locating hard-to-find bibliographic materials.

PACIFIC COAST ENTOMOLOGICAL SOCIETY

California Academy of Sciences
Golden Gate Park
San Francisco, Calif. 94118
Telephone: 221-5100 (Area code: 415)

The Society maintains a library, including films, which deals primarily with the insects of western North America. Topics covered are entomology and insect taxonomy, morphology, life history, and geographical distribution. There is a special collection of photographs and documents on the history of entomology. Loan and use of materials are restricted to persons with serious interests in the field.

The *Pan-Pacific Entomologist*, issued quarterly, may be obtained by subscription.

PACIFIC NORTHWEST BIBLIOGRAPHIC CENTER, *See* UNIVERSITY OF WASHINGTON

PACIFIC SCIENTIFIC INFORMATION CENTER

Bernice P. Bishop Museum
1355 Kalihi Street
Honolulu, Hawaii 96813
Telephone: 855-951 (Area code: 808)

The Pacific Scientifiic Information Center serves as a clearinghouse for the exchange of information on the natural and social sciences of the oceanic Pacific region: Polynesia, Micronesia, Melanesia, New Guinea, and closely related areas. It uses the Bishop Museum library and other libraries in Hawaii as its principal resources. The Center provides bibliographic references, answers to specific questions, and information on current research in the field. Fees are determined individually.

Several publications are issued by the Center at irregular intervals and may be purchased or obtained through exchange. *Pacific Scientific Information* lists, by country, scientific facilities and information services of the Pacific region. Reports are available on the Republic of Indonesia, the Federation of Malaya and State of Singapore, the Republic of Vietnam, and Polynesia, Micronesia, Melanesia, and New Guinea. *Pacific Anthropologists* and *Pacific Botanists* list persons working or actively interested in these fields. *Man in the Pacific*, an international anthropological newsletter, is a recent addition to the Center's publications program.

PACIFIC VEGETATION PROJECT

c/o National Academy of Sciences-National Research Council
2101 Constitution Avenue NW.
Washington, D.C. 20418
Telephone: 961-1492 (Area code: 202)

The Project maintains a specialized research file of literature and manuscript notes relating to the ecology, vegetation, flora, and geography of the Pacific islands, especially of coral islands and reefs, and to tropical vegetation in general. Brief answers to technical questions are provided free on a personal basis by two staff scientists as their time permits; assistance is given only to requesters with serious scientific interests. Answers to inquiries requiring more extensive effort may sometimes be provided by special arrangement with adequate financial support. The Pacific Vegetation Project edits and issues the *Atoll Research Bulletin*.

PALEONTOLOGICAL RESEARCH INSTITUTION

109 Dearborn Place
Ithaca, N.Y. 14850
Telephone: 273-6623 (Area code: 602)

The Institution is a workshop for the study of fossil and related material and houses samples, cores, and chips of sedimentary formations with accompanying maps and charts. Important among the localities covered are southern and eastern United States, Cuba, Haiti, Costa Rica, Panama, Dominican Republic, and northern and western South America. A library with literature in English, French, German, and Spanish relating to paleontology, stratigraphy, and related subjects is maintained.

The collections are open without restrictions for on-site use, and reference and consulting services are provided without charge.

Bulletins of American Paleontology, issued in one to two volumes per year, is available on subscription. *Paleontographica Americana,* issued irregularly, and other special studies and handbooks may be purchased. A price list is provided on request.

PALYNOLOGY RESEARCH CENTER, *See* UNIVERSITY OF OKLAHOMA

PATENT OFFICE, *See* U.S. DEPARTMENT OF COMMERCE

PATUXENT WILDLIFE RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE

PEABODY MUSEUM OF ARCHAEOLOGY AND ETHNOLOGY, *See* HARVARD UNIVERSITY

PENNSALT CHEMICALS CORP.

900 First Avenue
King of Prussia, Pa. 19406
Telephone: 265–3200 (Area code: 215)

Engaged in developing chemicals for construction use and for the maintenance of structures, the Corporation has a library with material on analytical, inorganic, organic, and physical chemistry and their technologies; chemical engineering; and chemical product applications in such fields as metal processing, laundering, dry cleaning, agriculture, textiles, plastics, rubber, and other specialties. Material is acquired from sources in English, Russian, French, and German.

Research workers of industrial companies and Government agencies as well as university faculty members may apply for access to the collection.

PENNSYLVANIA DEPARTMENT OF HEALTH

Division of Air Pollution Control

Post Office Box 90
Harrisburg, Pa. 17108
Telephone: 238–5151 (Area code: 717)

The Division collects and evaluates physical and chemical data on air pollution, conducts air testing surveys throughout the State, and examines sources of air contamination, making recommendations for abatement. Areas of interest include air pollution sources, particularly coal refuse disposal; air pollution control techniques, air pollution surveillance, air sampling techniques and equipment, meteorological data, air pollution regulations, and industrial toxicology. Information is provided to aid enforcement or drafting of air pollution control ordinances; a pollutant inventory is maintained; and standards and specifications are established.

As an information center, the Division provides consultant services, answers technical questions, makes technical data compilations, and distributes literature on air pollution and its control. Services are provided on request without charge, but are usually restricted to Pennsylvania. A collection of books, journals, reports, films and photos, maps and charts, and data is available for on-site use by qualified persons.

Publications issued by the Division include newsletters, technical reports, and conference proceedings. *Clear Air,* a quarterly newsletter, is available free on request.

PENNSYLVANIA MEDICAL SOCIETY

230 State Street
Harrisburg, Pa. 17101
Telephone: 238–1635 (Area code: 717)

The Society maintains a subject-indexed collection of journal articles covering all aspects of medicine. Loans are made to physician members for 2-week periods; loans to nonmembers are provided as time allows.

Subscription may be obtained to the monthly *Pennsylvania Medical Journal.*

PERMANGANATE INFORMATION SERVICE,
See CARUS CHEMICAL CO.

PETROLITE CORP.

Library and Information Retrieval Center

369 Marshall Avenue
St. Louis, Mo. 63119
Telephone: 961–3500 (Area code: 314)

The literature collection consists of journals, patents, and data on surface-active chemistry, corrosion inhibition, electrostatics, and petroleum waxes and derivatives. Consulting, reference, and document services are provided on specific request, subject to written approval by the Director of Research.

PHARMACEUTICAL MANUFACTURERS ASSOCIATION

1411 K Street NW.
Washington, D.C. 20006
Telephone: 628–6435 (Area code: 202)

A trade association of manufacturers of prescription drugs, PMA provides member companies with information on legal, economic, and scientific aspects of the drug industry. Two publications, *PMS Bulletin* and *Medicine at Work,* are available free to the public. Other publications are generally restricted to members.

PHARMACOLOGY RESEARCH, INC.

21 Main Street
Darby, Pa. 19023
Telephone: 586–0707 (Area code: 215)

A commercial laboratory, Pharmacology Research conducts studies in pharmacology and toxicology and has an accumulation of experimental data concerning normal and abnormal physiological parameters of the rhesus monkey, such as growth, development, hematology, biochemistry, histopathology, behaviour, and drug sensitivity. Advisory and consultant services are provided for a fee.

PHARMADYNAMICS, INC.

3726 Walnut Street
Philadelphia, Pa. 19104
Telephone: 386–6664 (Area code: 215)

This firm compiles, analyzes, and indexes toxicological and pharmacological data reported in a selected list of prime journals, technical reports, and patents, including sources in English, Russian, Italian, Spanish, French, and German. The compilation currently contains toxicity information on over 5,000 chemical compounds; approximately 150 compounds per month are added.

Consulting and reference services are provided at hourly rates. Services are available to professional scientists at a reduced cost.

PHILIP MORRIS, INC.

Research Center

Post Office Box 3–D
Richmond, Va. 23206
Telephone: 275–8361 (Area code: 703)

The Center has a collection of books, journals, reports, and patents pertaining to organic chemistry, physics, packaging, and tobacco chemistry and technology. Literature is in English and German.

Material is available for on-site reference. Copies of pertinent articles may be provided.

PHILIPS LABORATORIES

Broadway and Harriman Road
Irvington-on-Hudson, N.Y. 10533
Telephone: 591–8400 (Area code: 914)

A division of North American Philips Co., Inc., the Laboratories maintain a library in the fields of physics and electronics. Specific subject coverage includes crystallography, x-rays, fluorescent analyses, cathodes, solid state devices, transistors, electronic circuitry, magnetics and magnetic materials, microwave physics, microwave tubes, electron optics, inorganic chemistry, spectroscopy, theoretical physics, cryogenics, infrared physics, and plasma physics. Materials are in English, French, German and Dutch.

Although the library is primarily for Company personnel, document services are available to Special Library Association members and to Government agencies and their contractors. Consulting services are provided on a fee or contract basis.

PICKARD AND BURNS, INC.

103 Fourth Avenue
Waltham, Mass. 02154
Telephone: 894–8100 (Area code: 617)

Affiliated with the Gorham Corp., Providence, R.I., as an electronic engineering consultant organization, the Company analyzes and evaluates data in the areas of radio propagation, radio navigation, and precise time and frequency.

The organization maintains a depository collection of reports, available to qualified individuals, and prepares technical reports of its own research findings. Most reports are classified, and approval to receive or refer to them must be secured through proper channels. Reference services are available without charge; there is a fee for consulting services.

PICKLE PACKERS INTERNATIONAL, INC.

430 South Second Street
St. Charles, Ill. 60174
Telephone: 584–8950 (Area code: 321)

This trade association contracts research projects to universities and the Agricultural Research Service, U.S. Department of Agriculture, in the areas of plant pathology, bacteriology, agricultural engineering, agricultural economics, and food preservation. Technical questions are answered without charge.

PINEAPPLE RESEARCH INSTITUTE OF HAWAII

Mail:
Post Office Box 3166
Honolulu, Hawaii 96802

Location:
2500 Dole Street
Honolulu, Hawaii
Telephone: 994–690 (Area code: 808)

Sponsored by the growers and canners of pineapple in Hawaii, the Institute conducts research in its science laboratories on all aspects of pineapple culture, including variety development, pest control, and chemical analysis. Areas covered are agriculture, botany, soils, plant physiology and pathology, plant breeding, chemistry, chemical synthesis, biochemistry, and entomology. Source material is in English, Russian, Spanish, Italian, French, and German.

The library of the Institute has a collection of books, journals, reports, patents, films and photographs, maps, and charts which may be consulted on the premises or borrowed through interlibrary loan. The Angus collection of old prints and books on pineapples is available for on-site reference only.

PITTSBURGH MINING, COAL, AND EXPLOSIVES RESEARCH CENTERS, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

PLASTICS TECHNICAL EVALUATION CENTER, *See* U.S. DEPARTMENT OF DEFENSE

PLUM ISLAND ANIMAL DISEASE LABORATORY, *See* U.S. DEPARTMENT OF AGRICULTURE

PNEUMODYNAMICS CORP.

Cleveland Pneumatic Division

3781 East 77th Street
Cleveland, Ohio 44105
Telephone: 341–1700 (Area code: 216)

The Division generates reports and data on hydraulic and hydraulic-pneumatic shock absorption and mitigation, machining and processing of high-strength metals, flash butt welding of metals, and reinforced-plastic wrapping and molding. Certain processes and products are proprietary, but information is generally available to the public with few or no restrictions.

POLAROID CORP.

730 Main Street
Cambridge, Mass. 02139
Telephone: 864–6000 (Area code: 617)

The Corporation maintains a library and information service to provide its personnel with information on chemistry, physics, photography, engineering, and business. There is a special collection of articles dealing with polarized light. The language input is English, Russian, Italian, Spanish, French, and German.

The collection is not open to the public, but technical questions from the public are answered and brief searches performed when possible. Interlibrary loans may be arranged.

THE POPULATION COUNCIL

230 Park Avenue
New York, N.Y. 10017
Telephone: 689–1057 (Area code: 212)

The Population Council is a private, nonprofit, worldwide clearinghouse concerned with scientific information in the broad field of population, including demography and reproductive physiology, research-cum-action family planning programs, population growth rates in specific countries and regions, census data, migration, and contraceptive methods. It helps support various research and pilot projects throughout the world on population problems. It gives both grants and fellowships for demographic and medical-biological study and research.

Consulting and documentary services are available primarily to Government agencies and to private associations and academic institutions concerned with population study. *Studies in Family Planning,* issued three to four times per year, is available without charge to persons with a professional interest in family planning.

PORTLAND CEMENT ASSOCIATION

33 West Grand Avenue
Chicago, Ill. 60610
Telephone: 644–9660 (Area code: 312)

The Association acts as a clearinghouse for data on concrete design practices and construction methods, including paving, structural, railway, water resource, bridge, housing, and farm uses. It maintains laboratories and field-testing sites oriented toward research and development work in concrete technology. Projects are conducted in the areas of cement and concrete chemistry, concrete aggregates, concrete products, ready-mixed concrete, reinforced concrete, prestressed concrete, precast concrete, and concrete masonry.

As a source for information, PCA has a reference collection of books, journals, reports, films, slides, and photos; provides literature searches; answers technical questions on request; and loans films on various construction uses of portland cement, masonry cement, white cement, and concrete. Services are without charge. PCA also provides limited free distribution, within the United States and Canada, of its own publications. These include looseleaf technical reports, journals, conference proceedings, state-of-the-art reviews, design data handbooks, recommended quality control practices, and bibliographies. Technical publications and periodicals generally are available upon approval of request for inclusion on the Association's mailing list.

POTATO ASSOCIATION OF AMERICA

c/o Mr. John Campbell
New Jersey Agricultural Experiment Station
New Brunswick, N.J. 08903
Telephone: 247–1766 (Area code: 201)

A national organization, the Association provides information on research related to Irish potatoes, their production and handling, entomology and plant pathology, soils and fertilizers, food technology, seed potato certification, utilization, blight and virus diseases, nutrition, genetics, and cytology.

Questions are answered or referred to specialists. Photocopies and reprints may be provided in answer to inquiries; usually, no fees are charged for these documents. Extensive literature searches are generally not undertaken.

The *American Potato Journal,* published monthly, is available on subscription. The *Potato Handbook* is for sale.

POWER INFORMATION CENTER, *See* UNIVERSITY OF PENNSYLVANIA

PREVENTION OF DETERIORATION CENTER, *See* NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

PRINCETON UNIVERSITY

Bureau of Urban Research

School of Architecture Building
Princeton, N.J. 08541
Telephone: 921–6600 Extension 2139 (Area code: 609)

The Bureau coordinates and integrates information and conducts research in fields pertaining to urban planning, including architecture, engineering, sociology, economics, government, land use, population, utilities, and transportation. English, Italian, Spanish, French, and German sources are represented in its literature collection. Master plans for cities in the United States as well as cities abroad are available for study. There are both author and geographical catalogs.

The holdings are accessible to the public for on-site reference and on a loan basis for a 2-week period with the privilege of time extension. Answers to mail and phone inquiries are provided to anyone without charge as time permits. Interlibrary loan services are available.

Princeton University Library

The services provided are the same for all the specialized libraries that make up the Princeton University Library. All collections are open for on-site reference, and mail or phone inquiries are answered without charge as time permits. Photo and microfilm copying services are provided for a fee. Monographs and reports are available on interlibrary loan. Requests for reference and copying service should be addressed to the Assistant Librarian for Science and Technology, Princeton University Library, Princeton, N.J. The libraries are:

Accelerator Library

Princeton-Pennsylvania Accelerator
Forrestal Research Center
U.S. Highway No. 1
Princeton, N.J. 08541
Telephone: 921–8000 Extension 465 (Area code: 609)

In support of a special research project, the Library acquires current literature in English, Russian, Italian, Spanish, French, and German. Subject coverage is high-energy physics, radiation protection, particle physics, nuclear physics, and particle accelerators.

Aeronautical Engineering Library

Forrestal Research Center
U.S. Highway No. 1
Princeton, N.J. 08541
Telephone: 921–8000 Extension 222 (Area code: 609)

The collection covers aeronautical engineering, astronautics, applied mathematics, applied physics, physical chemistry, electronics, nuclear physics, instrumentation, control systems, and fluid mechanics. It consists of current American and foreign books, journals, and reports, and includes literature in Russian, Italian, Spanish, French, and German.

Astronomy Library

Princeton University
265 Fitzrandolph Road
Princeton, N.J. 08541
Telephone: 921–6600 Extension 2020 (Area code: 609)

This library contains complete series of major astronomical journals and a collection of books and reports on astronomy, astrophysics, space exploration, and spectroscopy. Foreign literature in Russian, Italian, Spanish, French, and German is acquired.

Biology and Geology Library

Princeton University
Guyot Hall
Princeton, N.J. 08541
Telephone: 921–6600 Extension 2280 (Area code: 609)

Holdings include books, journals, and reports on biology, geology, paleontology, geological engineering, zoology, botany, physiology, and geochemistry. The Sinclair Collection constitutes a special collection for the study of vertebrate paleontology. English, Russian, Italian, Spanish, French, and German sources are represented.

Chemistry Library

Princeton University
Frick Chemical Laboratory
Princeton, N.J. 08541
Telephone: 921–6600 Extension 747 (Area code: 609)

This library is devoted to general physical, organic, and inorganic chemistry, and biochemistry. Holdings include Russian, Italian, Spanish, French, and German literature. There is a special collection of foreign dissertations on chemistry.

Engineering Library

Princeton University
School of Engineering and Applied Science
Princeton, N.J. 08541
Telephone: 921–6600 Extension 2369 (Area code: 609)

The Library has books, journals, reports, and films, pertaining to civil, electrical, chemical, geological, and mechanical engineering; physics, solid state physics, rheology, plastics, nuclear engineering, computers, engineering economics, electronics, and mathematics. It also contains the Stanford H. Wilson Collection on fluid dynamics and diffusion studies. Chinese, Russian, Japanese, Italian, Spanish, French, and German sources are included.

Mathematics-Physics Library

Princeton University
Fine Hall
Princeton, N.J. 08541
Telephone: 921–6600 Extension 2224 (Area code: 609)

The collection consists of books, journals, and reports and covers mathematics, physics, statistics, history of science, and philosophy of science. Foreign source material is in Chinese, Russian, Japanese, Italian, Spanish, French, and German.

Plasma Physics Laboratory Library

Forrestal Research Center
U.S. Highway No. 1, Box 451
Princeton, N.J. 08541
Telephone: 924–9400 Extension 217 (Area code: 609)

To support research on the use of the energy released in the nuclear fusion of deuterium for the production of electric power, the Library acquires, abstracts, translates, and indexes books, journals, reports, and patents dealing with plasma physics, magetohydrodynamics, controlled fusion, and astrophysics. Foreign publications are in Chinese, Russian, Japanese, Italian, Spanish, French, and German.

Population Research Library

Princeton University
5 Ivy Lane
Princeton, N.J. 08541
Telephone: 921-6600 Extension 357 (Area code: 609)

This Library acquires and indexes books, journals, reports, and films dealing with demography, census, birth control, and statistics. Foreign literature in the collection is in Chinese, Russian, Japanese, Italian, Spanish, French, and German.

Psychology Library

Princeton University
Eno Hall
Princeton, N.J. 08541
Telephone: 921-6600 Extension 732 (Area code: 609)

The collection consists of books, journals, and reports on experimental psychology, general psychology, and animal psychology. Literature in English, Chinese, Russian, Japanese, Italian, Spanish, French, and German is included.

River and Harbor Library

Princeton University
School of Engineering and Applied Science
Princeton, N.J. 08541
Telephone: 921-6600 Extension 716 (Area code: 609)

Holdings consist of books, periodicals, reports, and other materials pertaining to rivers, harbors, port studies, soil mechanics, breakwaters, foundations, transportation, hydraulic engineering, and piles and pile driving. Foreign publications are acquired in Chinese, Russian, Japanese, Italian, Spanish, and French. Important source materials available elsewhere are also cataloged.

PRINGLE HERBARIUM, *See* UNIVERSITY OF VERMONT

PROJECT SETE, *See* NEW YORK UNIVERSITY

PROJECTS SUMMIT AND SPICE RACK, *See* UNIVERSITY OF PENNSYLVANIA

PROSTHETIC AND SENSORY AIDS SERVICE. *See* U.S. VETERANS ADMINISTRATION

PUBLIC HEALTH FEDERATION OF THE CINCINNATI AREA

2400 Reading Road
Cincinnati, Ohio 45202
Telephone: 721-3160 (Area code: 513)

The Federation, which coordinates planning of health services in an interstate five-county metropolitan area, disseminates information on community health planning, particularly in relation to health department services, chronic illness, rehabilitation, public health education, dental health, cancer control, and area-wide planning of hospitals and related health facilities. The Federation also maintains a Neoplastic Disease Registry at the Cincinnati General Hospital.

The technical reports issued by the Federation and a consulting service are available free within the Cincinnati metropolitan area. In most cases, there is a fee for such services provided outside this area.

PUBLIC HEALTH SERVICE, *See* U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PURDUE UNIVERSITY

Agricultural Information Department

Purdue University
Lafayette, Ind. 47907
Telephone: 92-2416 (Area code: 317)

Sponsored jointly by the Purdue University Agricultural Experiment Station and the U.S. Department of Agriculture, the Department generates reports and data on agricultural economics and engineering, agronomy, crops and soils, livestock and poultry, botany and plant pathology, entomology, forestry and conservation, home economics, horticulture, veterinary science, and biochemistry.

Residents of Indiana are given priority for the reference and document services available. These services are, however, also extended to others on an exchange basis and as supplies are available.

Single copies of the *Research Bulletin,* issued at irregular intervals, are available free to libraries within the United States.

Computer Sciences Center

Purdue University
Lafayette, Ind. 47907
Telephone: 92–2207 (Area code: 317)

The Center evaluates, analyzes, and generates data and reports in computer techniques as related to scientific research, classroom and job shop scheduling, pattern recognition, information retrieval, documentation, and mathematics and statistics. Services are available mainly for university and Government-sponsored research, but are extended also to others on a limited basis.

Engineering Experiment Station

Purdue University
West Lafayette, Ind. 47906
Telephone: 92–2174 (Area code: 317)

Composed of the laboratories of the various professional areas of engineering at the University, the Station provides facilities for areonautical, agricultural chemical, metallurgical, electrical, electronic, civil, industrial, mechanical, and nuclear engineering research. All research programs are geared to the graduate programs in engineering. Research policy, contract negotiation, and other inquiries involving agencies outside the University should be directed to the Director of the Engineering Experiment Station.

Information developed through research activities is disseminated by means of bulletins, circulars, and the technical press. Publications available free on request include *Research Activities Report* and *Abstracts of Staff Publications;* both issued biennially; the annual *Waste Conference Proceedings* may be purchased.

Jet Propulsion Center

Purdue University
Lafayette, Ind. 47907
Telephone 743–2474 (Area code: 317)

The Center conducts basic research in jet propulsion, including rocket engine combustion and related aerodynamic, gas-dynamic, and heat-transfer problems. The Center acquires and evaluates books, journals, and reports in English, Russian, Italian, Spanish, French, and German.

There are no restrictions on consulting and document services. Technical reports issued by the Center are obtainable on request.

Joint Highway Research Project

Purdue University
Lafayette, Ind. 47907
Telephone: 92–2111 (Area code: 317)

Facilities of the Joint Highway Research Project, which is sponsored by the Indiana State Highway Commission, comprise airphotointerpretation, bituminous and paint, chemical, concrete, and soils laboratories engaged in highway engineering research. Highway safety and traffic studies are also made. The literature collection which supports the Project consists of books, journals, reports, films and photos, maps and charts, data, and nonprinted material. Sources in Russian, Italian, Spanish, French, and German are included.

Reference, document, and consulting services are available. There are no restrictions.

Literature Retrieval System for Inorganic Compounds

c/o Dr. Karl S. Vorres
Department of Chemistry
Purdue University
Lafayette, Ind. 47907
Telephone: 92–2521 Extension 252 (Area code: 317)

This bibliographic service processes published information on the preparation, properties, and interactions of inorganic compounds, including structure, phase equilibria, thermodynamic, electrical, magnetic, and optical reactions, phase transitions, intrinsic properties, theory, apparatus, experimental work, reviews, and textbooks. Classification is made in seven volumes by compound, subject, and bibliographic reference. Books, journals, and reports are collected from sources in all languages.

Material is available for a fixed fee. Complete annual computer printouts with five bimonthly updating supplements are anticipated.

Studies in Higher Education, published at irregular intervals, may be purchased.

Thermophysical Properties Research Center

Purdue University
2595 Yeager Road
West Lafayette, Ind. 47906
Telephone: 743–3827 (Area code: 317)

Under Government and industry sponsorship, the Center performs experimental and theoretical research on the thermophysical properties of all gases, liquids, and solids. Properties covered include thermal conductivity, specific heat, viscosity, emissivity, reflectivity, transmissivity, absorbtivity, diffusion coefficient, thermal diffusivity, and Prandtl number. The Center maintains a mechanized bibliographic index of world literature on the thermophysical properties of all materials in all major languages. It makes technical evaluation of the accuracy, quality, and significance of the information.

The collection is available for direct use by approved visitors. Answers to technical questions, information concerning current research and development projects, and scientific or technical data or data compilations are provided. Literature searches, state-of-the-art reviews, and correlations of information are available to nonsponsors for a fee determined by the extent of the effort expended.

Data Books and *Retrieval Guide to Thermophysical Properties Research Literature* may be purchased directly from the Center. Descriptive literature is obtainable free on request.

Trace Level Research Institute

Purdue University
Lafayette, Ind. 47907
Telephone: 92–2734 (Area code: 317)

The Institute does research on pharmacology, toxicology, and metabolism, with particular emphasis on chemical residues left in living systems by food additives, animal feed additives, drugs, cosmetics, animal growth promoters, plant nutrients and hormones, pesticides, and soil additives. Research services are provided for a fee.

University Libraries and Audio-Visual Center

Purdue University
Lafayette, Ind. 47907
Telephone: 92–2571 (Area code: 317)

Barker Memorial Center Library
631 Washington Street
Michigan City, Ind. 46360
Telephone: 872–7293 (Area code: 219)

Calumet Center Library
2233 171st Street
Hammond, Ind. 46323
Telephone: 844–0520 (Area code: 219)

Fort Wayne Center Library
Jefferson and Barr Streets
Fort Wayne, Ind. 46802
Telephone: 26–3171 (Area code: 219)

Indianapolis Center Library
1125 East 38th Street
Indianapolis, Ind. 46205
Telephone: 923–2311 (Area code: 317)

The University Libraries contain literature in all major languages, including Afrikaans and Turkish, in the following fields of science and technology: aeronautical and engineering sciences; agriculture, agricultural economics; biology; biochemistry; civil, electrical, industrial, mechanical, chemical, and metallurgical engineering; chemistry; forestry and horticulture; geology; mathematics; pharmacy; physics; psychology; veterinary science and medicine; and engineering history. A file of translations of foreign journal articles is maintained, as well as a listing of translations available for purchase from off-campus agencies. A map collection includes maps received from the U.S. Army Map Service, the U.S. Geological Survey, and the Department of Agriculture.

Reference and document services are available to Purdue students and faculty, members of the community, and contractors. Material is available to others through interlibrary loan.

The Audio-Visual Center has a collection of films and tapes for use as teaching aids. Materials are available on loan to approved persons. The Center also has a motion picture production unit specializing in science film production and a graphics unit for agriculture and engineering.

RADIATION EFFECTS INFORMATION CENTER, *See* BATTELLE MEMORIAL INSTITUTE

RADIATION SHIELDING INFORMATION CENTER, *See* OAK RIDGE NATIONAL LABORATORY

RAYONIER, INC.

161 East 42d Street
New York, N.Y. 10017
Telephone: 687–7880 (Area code: 212)

The company's research department has a collection of data pertaining to the utilization of cellulose and cellulose products, wood and woodpulp, silvichemicals, cellulose acetate, viscose fibers, bark chemicals, hemicellulose, wood extractives, and lignosulfonates.

Information on the general utilization of cellulose products is provided. Internal know-how on manufacturing operations and cellulose production is restricted to company staff. A technical consulting service is available to customers only. Inquiries should be addressed to the Manager, Technical Services.

RAYTHEON CO.

Division Libraries

Services provided by the Raytheon Libraries are limited for non-Company personnel to interlibrary loan of books and journals and to some documents that may be obtained for retention when supply permits.

Bedford Complex Library

Raytheon Co.
Post Office Box 398
Hartwell Road
Bedford, Mass. 01730
Telephone: 274–7100 (Area code: 617)

Books, journals, and reports are acquired on guided missiles, space vehicles, aerodynamics, electronics, physics, and mathematics.

Communications and Data Processing Operations Library

Raytheon Co.
1415 Boston-Providence Turnpike
Norwood, Mass. 02062
Telephone: 762–6700 (Area code: 617)

Holdings are in electrical and electronic engineering, mathematics, and physics. Material acquired includes books, journals, reports, reprints, and military specifications.

Equipment Division Headquarters Library

Raytheon Co.
Post Office Box 520
Winter Street
Waltham, Mass. 02154
Telephone: 899–8000 Extension 158 (Area code: 617)

The Library acquires books, journals, reports, pamphlets, and clippings on aeronautics and weapons systems.

Lowell Library

Raytheon Co.
Post Office Box 740
Woburn Street
Lowell, Mass. 01852
Telephone: 452–8911 Extension 306 (Area code: 617)

Areas covered in the collection are mathematics, pure and applied sciences, business management, mechanical design, plastics, metallurgy, and statistics. Books, journals, reports, trade catalogs, and military specifications are acquired.

Missile Systems Division Engineering Reference Library

Raytheon Co.
Haverhill Street
Andover, Mass. 01811
Telephone: 475–5000 (Area code: 617)

The Library has books, journals, reports, and specifications relating to engineering and guided missile systems and subsystems.

Missile Systems Division Library

Raytheon Co.
Vance Tank Road
Bristol, Tenn. 37622
Telephone: 765–1122 (Area code: 615)

Subjects covered are chemistry, statistics, mathematics, electronics, and management. The collection consists of books, journals, reports, reprints, and pamphlets.

Research Division Library

Raytheon Co.
28 Seyon Street
Waltham, Mass. 02154
Telephone: 899–8400 Extension 2196 (Area code: 617)

The Library's holdings cover mathematics, physics, physical chemistry, and electrical engineering. Material in the collection includes books, journals, reports, patents, pamphlets, microfilm, translations, reprints, and photostats. Interlibrary loans are made.

Santa Barbara Operations Library

Raytheon Co.
Post Office Box 636
Santa Barbara, Calif. 93102
Telephone: 967–5511 (Area code: 707)

The Library acquires books, journals, and reports dealing with electronics, mathematics, physics, electrical engineering, and space sciences.

Semiconductor Division Technical Library

Raytheon Co.
350 Ellis Street
Mountain View, Calif. 94041
Telephone: 968–9211 (Area code: 415)

The collection consists of books, journals, reports, and patents relating to semiconductor materials and technology, transistor fabrication and technology, electronics, solid state physics, physical chemistry, and electrochemistry.

Submarine Signal Operations Library

Raytheon Co.
1847 West Main Road
Portsmouth, R.I. 02871
Telephone: 847–8000 (Area code: 401)

Subjects covered by the collection of books, journals, and reports are electronics; underwater and air acoutiscs; antisubmarine warfare electrical engineering; applications of radar, communications, and weapons systems; transducers; and piezoelectric materials.

Sudbury Operations Library

Raytheon Co.
528 Boston Post Road
Sudbury, Mass. 01776
Telephone: 443–9521 Extension 2282 (Area code: 617)

The Library provides coverage in electrical and electronic engineering, communication engineering, and space flight. The collection consists of books, journals, and reports.

Wayland Library

Raytheon Co.
Boston Post Road
Wayland, Mass. 01778
Telephone: 358–2721 Extension 349

The Library has books and journals on electronics, radar systems development, navigation and flight control equipment, and special displays.

REMINGTON ARMS CO., INC.

Supporting Research and Development Library

939 Barnum Avenue
Bridgeport, Conn. 06602
Telephone: 333–1112 (Area code: 203)

Servicing Company needs, the Library has a book, journal, and report collection in the areas of ammunition, ballistics, and explosives. Services are available to non-Company personnel by special request.

RENO METALLURGY RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

RENSSELAER POLYTECHNIC INSTITUTE

Troy, N.Y. 12181
Telephone: 272–300 (Area code: 518) TWX: 518–241–6390

The Rensselaer libraries acquire books, journals, reports, and maps and charts on all aspects of the applied and basic sciences. There are special holdings of reports issued by the U.S. Atomic Energy Commission and the National Aeronautics and Space Administration, and of maps prepared by the U.S. Geological Survey. Material is collected in English, Russian, Italian, Spanish, French, and German.

The collections are open to the public; books other than reference works and journals are circulated on interlibrary loan. Reference, document, and photoduplication services for portions of reference works and journals needed are available.

REPUBLIC AVIATION CORP.

Engineering Library

Conklin Street
Farmingdale, N.Y.
Telephone: 531–3497 (Area code: 516)

To serve the Corporation's technical information needs, the Library maintains a collection of books, journals, reports, films, and maps and charts in the following scientific and technical areas as they relate to aviation: aerospace sciences, biological and medical sciences, chemistry, communications, detection and countermeasures, astronomy, electrical and electronic engineering, fuels, guided missiles, materials and metallurgy, mathematics and data processing, mechanical and structural engineering, military science, navigation and guidance, nuclear science and technology, ordnance, physics, and human factors and human engineering. Special collections include a file of cover-to-cover translations of Russian periodicals, a collection of NASA technical reports, and a complete collection of NASA microforms.

Use of the Library for reference may be requested. An interlibrary loan service for unclassified material is available. *Engineering Library Technical Information Bulletin,* an announcement journal, is distributed every 3 weeks without charge.

REPUBLIC STEEL CORPORATION

Research Center Library

Post Office Box 7806
6801 Brecksville Road
Cleveland, Ohio 44131
Telephone: 524–4101 Extension 246 and 247
(Area code: 216)

The Library has a collection on ferrous metallurgy, chemistry, and physics. Holdings include books, journals, technical reports, patents, and translations. Languages represented are French, German, Italian, Japanese, and Russian.

Document and reference services are available to special libraries. Bibliographies and accessions lists are issued.

RESEARCH MATERIALS INFORMATION CENTER, *See* OAK RIDGE NATIONAL LABORATORY

RESOURCES FOR THE FUTURE, INC.

1755 Massachusetts Avenue NW.
Washington, D.C. 20036
Telephone: 462–4400 (Area code: 202)

Supported by the Ford Foundation, Resources for the Future conducts an independent research program on the development, conservation, and use of natural resources, with emphasis on energy, minerals, land use and management, water resources, regional studies, resource appraisals, general resource studies, and resources education. Grants and dissertation fellowships are provided to other nonprofit institutions to carry out studies in the field.

Research results are disseminated through books which are available commercially. *Resources*, an announcement journal, is issued three times yearly. A mailing list is maintained on which anyone may be placed on request to receive announcements of new books and reprints, free copies of *Resources*, and the *Annual Report.*

REVLON RESEARCH CENTER, INC.

2417 Third Avenue
New York, N.Y. 10051
Telephone: 993–3000 (Area code: 212)

The Center maintains a library in support of its research and development activities in cosmetics. Access to the literature collection is permitted, and reference service is furnished without charge. Information on company formulas and research is restricted.

REYNOLDS METALS CO.

Technical Information Center

Fifth and Cary Streets
Richmond, Va. 23218
Telephone: 643–8481 (Area code: 703)

A part of the Company's Product Development Division, the Center has a library on aluminum, aluminum alloys, alumina, bauxite, production, fabrication, uses, finishing, corrosion, metallurgy, castings, wrought products, packaging, printing, joining, forming, properties, natural resources, standards, and chemicals. The collection includes books, journals, reports, patents, data, and nonprinted material.

Holdings are available for on-site use, and reference and document services are provided. Letter requests for information are handled as time permits. Access to research and development project files is restricted. Interlibrary loans are available.

RHODE ISLAND MEDICAL SOCIETY

106 Francis Street
Providence, R.I. 02903
Telephone: 331–3208 (Area code: 401)

The Society's library has books, journals, reports, films and photos, and maps and charts on medicine, including its clinical, economic and historical aspects, and veterinary medicine. Its Davenport Collection contains nontechnical writings by and about physicians.

Circulation of materials is restricted to fellows of the Rhode Island Medical Society, members of other scientific groups sponsored by fellows, and interlibrary loan. The *Rhode Island Medical Journal* is published monthly.

RICH ELECTRONIC COMPUTER CENTER, *See* GEORGIA INSTITUTE OF TECHNOLOGY

ROCHESTER INSTITUTE OF TECHNOLOGY

Graphic Arts Information Service

Rochester Institute of Technology
65 Plymouth Avenue, South
Rochester, N.Y. 14608
Telephone: 562–5780 (Area code: 716)

The Graphic Arts Information Service disseminates research findings and provides a consulting service for the printing industry. It maintains a technical library of books, journals, and industrial literature, including British and German publications, makes literature searches and compiles bibliographies on specific subjects in the graphic arts field, answers technical questions, and provides referral services on request.

Consulting services and literature searches are on a fee basis; there is no charge for bibliographies and research reports, a list of which is available on request. The technical library is accessible for direct use by approved visitors; there is a charge for photocopying services.

Graphic Arts Progress, published since 1954, is the bimonthly bulletin of the Graphic Arts Research Department of RIT. It is divided into two sections. The first section is a summary of the periodical literature on certain selected topics; the second consists of the *Graphic Arts Index,* a list of current articles selected from about 150 trade publications and grouped into various categories. *Graphic Arts Progress* may be obtained on subscription or purchased in individual copies. It is available without charge to libraries and educational and research institutions. Some back issues are still available; those published prior to 1962 are provided without charge.

Library

Rochester Institute of Technology
160 Spring Street
Rochester, N.Y. 14608
Telephone: 562–5780 (Area code: 716)

The Library has a collection of books, journals, reports, and data in all the technical programs offered by the Institute. In addition to basic works in the applied sciences, business, fine and applied arts, and the graphic arts, there are special holdings in photography, including the Photographic Society of America collection, printing, vacuum technology, water conservation and purification, and heterocyclic organic compounds. The collection is available for direct reference use; interlibrary loan and referral services are provided. There is a charge for reproduced material.

ROCKY MOUNTAIN HERBARIUM, *See* UNIVERSITY OF WYOMING

ROLLA METALLURGY RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

ROY C. INGERSOLL RESEARCH CENTER, *See* BORG-WARNER CORPORATION

RURAL ELECTRIFICATION ADMINISTRATION, *See* U.S. DEPARTMENT OF AGRICULTURE

RUTGERS—THE STATE UNIVERSITY

Center of Alcohol Studies

Rutgers—The State University
Smithers Hall
University Heights
New Brunswick, N.J. 08901
Telephone: 247–1766 Extension 2383 (Area code: 201)

The Center of Alcohol Studies, formerly located at Yale University, collects scientific literature on alcohol, alcoholism, and related fields, and prepares and maintains the Classified Abstract Archive of the Alcohol Literature (CAAAL). Areas of interest include physiology, biochemistry, psychiatry, psychology, sociology, economics, education, law, medicine, social service, and penology. Abstracts of books, journals, and reports are coded on the basis of 24 major topical categories and published on sorting cards, which are systematically arranged for automatic storage and retrieval. Reprints or photocopies of the items abstracted are maintained in the Center's library, together with other literature and data relevant to alcohol and alcoholism. The library does not collect information on technical and industrial uses of alcohol. Foreign literature includes material in all languages.

The Center prepares on request topical bibliographies from CAAAL and provides photocopies of abstract cards and library materials. There is a fee. Direct use of the CAAAL and the library is available to researchers, scholars, and students; library resources are also available on interlibrary loan. Technical guidance on the use of the CAAAL is provided, but visits must be arranged in advance.

Complete sets of CAAAL cards and current card issues are kept at 51 depositories located in the United States, Europe, South America, Australia, and Asia. Reference and bibliographic services are a matter of individual policy.

Current CAAAL cards are sold to libraries, institutions, and organizations on a subscription basis. Earlier annual sets are also available. The Center publishes the *Quarterly Journal of Studies in Alcohol,* obtainable on subscription, which presents research reports and provides abstracts from the world literature classified under 14 headings and indexed by subject and author.

Central Library

Rutgers—The State University
College Avenue
New Brunswick, N.J. 08901
Telephone: 647–1766 (Area code: 201)

A reference resource for programs of instruction at the University, the Central Library has a working collection of scientific literature in the areas of agriculture, chemistry, biology, physics, engineering, ceramics, geology, and mathematics, in addition to material in the arts and humanities. Holdings consist of books, journals, reports, and patents. The Library is a depository for U.S. Government documents. Material is collected in all major languages.

College of Pharmacy Library

Rutgers—The State University
1 Lincoln Avenue
Newark, N.J. 07104
Telephone: 643–1766 Extension 272 or 277 (Area code: 201)

Organized to support the College of Pharmacy curricula, the Library is a depository for information on pharmacy, pharmacology, history of pharmacy, biological sciences, medicine, chemistry, and biochemistry. Books, journals, and reports are collected in English, Japanese, Russian, French, and German.

The holdings are accessible for direct reference use; interlibrary loan and photocopying services are provided.

College of South Jersey Library

Rutgers—The State University
406 Penn Street
Camden, N.J. 08102
Telephone: 964–1766 (Area code: 609)

A general reference source in the sciences and humanities, the Library collects literature in the areas of biology, chemistry, geology, mathematics, physics, and the liberal arts. Holdings consist of books and journals in English, Spanish, French, and German.

The collection is open for direct use, and interlibrary loan and duplicating services are available.

Institute of Microbiology

Rutgers—The State University
University Heights Campus
New Brunswick, N.J. 08901
Telephone: 247–1766 Extension 2461 (Area code: 201)

The Institute of Microbiology conducts programs of research in microbiology, biochemistry, medicine, and antibiotics, and maintains a library in these fields for the use of professional scientists. Literature is collected in all major languages and consists of books, journals, and patents. Reference and loans services are available to professional personnel and are occasionally extended to students and others. Limited requests for photoduplicating and microfilm services are handled without charge.

Newark Colleges Library

Rutgers—The State University
40 Rector Street
Newark, N.J. 07102
Telephone: 643–1766 (Area code: 201)

The Newark Colleges Library provides general subject coverage in the sciences and humanities. Holdings consist of books and journals in the fields of anthropology, astronomy, microbiology, botany, business administration, chemistry, education, geography, geology, library science, mathematics, nursing, philosophy, physiology, physics, political science, psychology, social work, sociology, and zoology. Foreign literature includes material in all major European languages.

The Library is accessible for on-site reference. Interlibrary loans are made and photocopies provided.

New Jersey Agricultural Experiment Station

Rutgers—The State University
Nichol Avenue
New Brunswick, N.J. 08901
Telephone: 247–1766 Extension 7447 (Area code: 201)

Consisting of a research laboratory and field stations, the Agricultural Experiment Station conducts research in agricultural economics, the animal and plant sciences, home economics, and human nutrition.

The Station answers technical inquiries and provides consulting and referral services regarding State agricultural problems. Single copies of publications are distributed free or at publishing cost; publications are provided to libraries on an exchange basis.

Research findings are disseminated in technical reports and in the bimonthly *New Jersey Agriculture.* Single copies are available without charge.

New Jersey College of Agriculture Library

Rutgers—The State University
Nichol Avenue
New Brunswick, N.J. 08901
Telephone: 247–1766 Extension 1358 (Area code: 201)

The Library provides subject coverage in the agricultural sciences, biomedical research, sanitary and water engineering, meteorology, food science, wildlife conservation, animal and plant physiology, animal and veterinary science, soils, entomology, horticulture, and forestry. Holdings consist of books, journals, and reports in all major languages.

The Library is open for on-site use. Interlibrary loan and photocopying services are provided.

RYAN AERONAUTICAL CO.

Engineering Library

2701 Harbor Drive
San Diego, Calif. 92117
Telephone: 296–6681 Extension 1461 (Area code: 714)

The Library serves primarily to support the work of employees. Subject specialization is aircraft, missiles, and space technology. The collection is composed of books, journals, reports, data, nonprinted material, and engineering drawings. English, French, and German sources are represented.

Unclassified material is available on loan to non-Company personnel. Visits for reference use can be arranged. Referrals are made to other local information resources.

SADTLER RESEARCH LABORATORIES, INC.

1517 Vine Street
Philadelphia, Pa. 19102
Telephone: 564–0835 (Area code: 215)

Sadtler Research Laboratories gather organic and inorganic compounds from which physical data are generated, including infrared, ultraviolet and nuclear magnetic resonance spectra. These are indexed alphabetically by molecular formula and chemical class, as well as the location of important data, such as infrared absorption bands. The data are published and are also available on magnetic computer tapes. Consulting service is provided and technical questions answered for a fee. A listing of infrared, ultraviolet, and NMR specifications available for sale will be sent on request.

ST. LOUIS MEDICAL SOCIETY

3839 Lindell Boulevard
St. Louis, Mo. 63127
Telephone: 371–5225 (Area code: 314)

The St. Louis Medical Society maintains a library, a museum, and a public information office. The library contains material on all aspects of the medical sciences. Literature is in English, Italian, French, Latin, and medieval German. Special collections are the Robert E. Schlueter collection of medical history since the 16th century; the St. Louis collection, comprising 200 years of medical writing and publication by St. Louisans; and the Paracelsus collection of the works of Paracelsus on medieval medicine. The museum collection consists of reconstructions of historical doctor's offices and other medical facilities, and displays of medical instruments, medical books, and medical history.

Both the library and the museum are open to the public; on-site access is unrestricted. Questions by the public are answered and bibliographic searches made by library staff members. Photocopying is done and personal and interlibrary loans are available. There is no charge for any service to members of the medical profession. Subscriptions may be obtained by members of the scientific and technical community for unlimited use of library material.

The semimonthly *St. Louis Medicine* is distributed by subscription. There is controlled, free distribution of the biennial *W. W. Graves Lectures on the Human Constitution.*

SALT LAKE CITY METALLURGY RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

SAN DIEGO NATURAL HISTORY MUSEUM

Post Office Box 1390
San Diego, Calif. 92112
Telephone: 232–9146 (Area code: 714)

Holdings of the Museum's scientific library consist of books and journals on biology and geology, especially as related to the southwestern United States. English, Russian, Italian, Spanish, French, and German sources are represented.

The collection is accessible for on-site use, and interlibrary loans are made. Publications sold at cost include *Memoirs of the San Diego Society of Natural History, Transactions of the San Diego Society of Natural History,* and *Occasional Papers of the San Diego Society of Natural History.*

SANDY HOOK MARINE LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE

SAN FRANCISCO PETROLEUM RESEARCH LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

SCHERING CORP.

Scientific and Technical Information Center

60 Orange Street
Bloomfield, N.J.
Telephone: 743-6000 (Area code: 201)

The Center includes a library and a mechanized retrieval system for internally generated biological and chemical data. Subjects emphasized are pharmacy, pharmacology, organic and medicinal chemistry, medicine, microbiology, experimental medicine, management, and drug trade. The collection consists of books, journals, reports, patents, and data. Foreign literature in French, Russian, German, Spanish, and Italian is acquired.

The Center's services are primarily for Corporation personnel; however, limited on-site reference, as well as limited loan and photocopying services, are available to others.

Publications issued include the daily *In the News*, the weekly *Current References in the Schering Library*, and the monthly *New Books in the Schering Library*. All are available upon request.

SCHOOL OF AEROSPACE MEDICINE, *See* U.S. DEPARTMENT OF DEFENSE

THE SCIENCE BUREAU OF THE METROPOLITAN WASHINGTON BOARD OF TRADE

1616 K Street NW.
Washington, D.C. 20006
Telephone: 783-3535 (Area code: 202)

Supported by private local research and development firms and Federal agencies, the Bureau provides directories and information on individuals and organizations in industry, Government, and higher education in the Washington, D.C., area engaged in research and development. Chief emphasis is on the physical sciences, engineering, and mathematics. Covered also are life and social sciences, documentation, and data processing services and equipment. Questions are answered by the Bureau's staff. Services are primarily, but not exclusively, for members.

The *Directory of Scientific Resources in the Washington, D.C., Area*, published by the Bureau, lists research and development firms active in the physical, life, social, and psychological sciences and in documentation, operations research, and the field of computers; scientific foundations and institutions; Federal research facilities; scientific activities of colleges and universities; scientific academies, associations, and societies; and libraries.

SCIENCE COMMUNICATION, INC.

1079 Wisconsin Avenue NW.
Washington, D.C. 20007
Telephone: 333-1343 (Area code: 202)

A technical consulting and service organization that is primarily user oriented, Science Communication conducts surveys of information needs in specific fields, studies and designs technical information systems, makes literature searches and prepares state-of-the-art studies, and operates an information center and library. Books, journals, reports, and official documents are collected in science and technology, with emphasis on the information sciences and engineering data inventorying. Other areas of interest include explosion phenomena, biological and chemical warfare defense, aerospace technology and science, earth sciences, with emphasis on the upper atmosphere, antarctic research activities, and chemical process technology.

Studies and consulting services are provided on a fee or contract basis. The library is maintained for the staff, but cooperation is extended to others in individual cases. Recent publications include: *Properties of the Upper Atmosphere,* a state-of-the-art review; *A Guide to Antarctic Information Sources;* and *Recovery and Decontamination Measures after Biological and Chemical Attack.* All are available for purchase from the Office of Technical Services, Department of Commerce, Washington, D.C., 20234.

SCIENCE INFORMATION EXCHANGE, *See* SMITHSONIAN INSTITUTION

SCIENTIFIC APPARATUS MAKERS ASSOCIATION

20 North Wacker Drive
Chicago, Ill. 60606
Telephone: 782-0277 (Area code: 312)

SAMA generates standards and specifications for scientific instruments and related products, as well as data related to the scientific instruments industry. Technical questions are answered free. For specific items, inquiries may be referred to member companies.

Special studies and industry statistics are restricted to use by members.

The SAMA Industry Standards and Tenative Standards may be purchased from the Recorder-Controller Office at the New York address. Free subscriptions are available for *SAMA Newsletter, Washington Newsletter,* both issued monthly, and *Legislative Bulletin,* which appears irregularly.

SCIENTISTS' INSTITUTE FOR PUBLIC INFORMATION

30 East 68th Street
New York, N.Y. 10021
Telephone: 249–2886 (Area code: 212)

The Institute encourages and coordinates the activities of local science information groups which identify scientific problems relevant to public issues, collect technical information, and present this to the public in objective, understandable terms.

A small library and bibliographic service is provided by the Institute for the constituent groups. Topics emphasized are various forms of environmental contamination, such as radiation, air and water pollution, pesticides, and food additives, and such social issues as automation, race, industrial uses of nuclear energy, and population control.

Inquiries concerning the Institute's activities are welcomed and assistance is provided to scientists and science writers in search of information. *Nuclear Information,* a monthly, is sponsored by the Institute.

SCRIPPS INSTITUTION OF OCEANOGRAPHY, *See* UNIVERSITY OF CALIFORNIA, SAN DIEGO

SEATTLE COAL RESEARCH LABORATORY *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

SHULTON, INC.

697 Route 46
Clifton, N.J. 07011
Telephone: 777–4600 Extension 224 (Area code: 201)

Maintained to serve research and development efforts in the cosmetics field, the company's library specializes in organic chemistry, cosmetology, industrial chemicals, essential oils and flavors, perfumery, dermatology, pharmaceuticals, household chemicals, and pesticides. Publications are acquired in English, Russian, Italian, French, and German. The library has an arrangement with the library of the U.S.S.R. Academy of Sciences in Leningrad whereby complete subscriptions can be exchanged. A list of the library's own translations from Russian is free on request.

Interlibrary loans and services are available to professional and industrial libraries.

A. O. SMITH CORP.

Post Office Box 584
3533 North 27th Street
Milwaukee, Wis. 53201
Telephone: 873–3000 (Area code: 414)

The technical library of the Corporation acquires books, journals, reports, patents, films, and photos on metallurgy, welding, materials testing, plastics, ceramics, mechanical engineering, electrical and electronics engineering, metal fabrication, chemistry, physics, computer technology, marketing, management, economics, and data processing. Publications are in English, Russian, Italian, French, Spanish, and German.

Information services are primarily for Corporation personnel, but reference and photocopying services are provided to others as priority requirements and time permit. Interlibrary loans are made.

SMITHSONIAN INSTITUTION

10th and Jefferson Drive SW.
Washington, D.C. 20560
Telephone: 628–1810 (Area code: 202)

The Smithsonian Institution was founded in 1846 for the "increase and diffusion of knowledge among men." This is accomplished by scientific, historical, and technological research; museum, art gallery, and zoological park exhibits; expeditions; publications; library services; and by answering specific inquiries by letter or telephone, through personal consultation with subject matter specialists, and by providing access to the collections. Data compilations may be performed as staff time permits; specimens and other objects of scientific, technological, or historical interest will be identified; and information will be supplied, as available, on the location of other research materials. Photographs and slides of many of the objects in the collections are available or can be produced. Inquiries concerning the program activities, collections, and facilities of the Institution should be directed to the appropriate organizational units described below.

The Smithsonian issues a wide range of annual reports, bulletins, proceedings, monographs, and special publications. Some of these are identified under the applicable organizational units. In addition, between 200 and 300 scientific, technical, and historical papers a year are published in journals and other non-Smithsonian media by members of the staff. Also, more than 250 leaflets have been prepared, covering bibliographies, checklists, lists of photographs, and other subjects. More detailed information concerning Smithsonian publications may be obtained from the Editorial and Publications Division at the above address.

Consistent with its liberal policy regarding the dissemination of information resulting from its research or based on its collection, the Smithsonian places no conditions or restrictions on the use of its information services.

The following entries describe the areas of subject specialization in the fields of science and technology within the Smithsonian Institution.

Astrophysical Observatory

Department of Astrophysical Research
60 Garden Street
Cambridge, Mass. 02138
Telephone: 864–7910 (Area code: 617)

Division of Radiation and Organisms
10th and Jefferson Drive SW.
Washington, D.C. 20560
Telephone: 381–5339 (Area code: 202)

The Astrophysical Observatory includes the Department of Astrophysical Research and the Division of Radiation and Organisms. In the planetary sciences, use of precise artificial satellite-tracking data obtained by a camera network of 12 satellite-tracking stations located in the United States and abroad aids in the determination of the density of the earth's atmosphere, a detailed specification of the earth's gravitational potential, and knowledge of the geometrical figure of the earth. Phenomena in the earth's high atmosphere are being studied, and the atmospheres and surfaces of other planets are under investigation. Lunar research includes the determination of the moon's gravitational potential. Meteoritic studies involve the nature of meteoritic matter in the solar system, the theory of meteors in the earth's atmosphere, mineralogical and metallurgical analyses, and observations of artificial bodies simulating meteorites. The objective of the Photographic Meteorite Recovery Program is to recover meteorites by trail photography and determination of impact points. As a contribution to knowledge of the origin of the solar system, cometary studies concentrate on the problem of the cometary nucleus. Solar and stellar observations are being emphasized by participation in the U.S. Orbiting Solar Observatory program including Project Celescope, whose primary goal is to obtain ultraviolet star catalogs.

A branch of the Smithsonian Library at the Observatory maintains a collection on astrophysics, specifically mass spectrometry, high-altitude balloons and artificial satellites, radioastronomy, gas and thermodynamics, gravitation, ultraviolet and other radiation, cosmic rays, terrestrial and stellar atmospheres, visual and photographic satellite tracking, meteors, space engineering and communication, geodesy, and geophysics.

The research program of the Division of Radiation and Organisms is concerned with the effects of solar and ionizing radiation on biological systems, with emphasis on developing systematic concepts of the metabolic mechanisms and responses of living organisms as influenced and regulated by radiation. Areas of concentrated effort include problems relating to the regulation of metabolism by radiation, the determination of structure and function of macromolecules involved in energy storage, and the measurement of seasonal changes in spectral plant responses. For fundamental investigation of radiation responses, a section is organized within the Division for marine biology research. The long-term aim of this study is toward establishing an adequate understanding of the physiology and biochemistry of the occurrence, behavior, and potential harvest of marine organisms.

Publications of the Astrophysical Observatory include *Special Reports of the Astrophysical Observatory,* issued approximately monthly; *Smithsonian Contributions to Astrophysics,* issued annually; and *Annals of the Astrophysical Observatory,* issued about once every 10 years. Most of the results of the research of the Division of Radiation and Organisms appears in outside journals.

Bureau of American Ethnology

10th and Jefferson Drive SW.
Washington, D.C. 20560
Telephone: 381–5308 (Area code: 202)

The Bureau is concerned with anthropological studies of the American Indians and the natives of lands under the jurisdiction and protection of the United States, and with the excavation and preservation of archeological remains pertaining to these peoples. Archeological investigations range from the Arctic through North and Middle America and include all types of sites. Ethnological studies include social and political organizations, customs, beliefs, native crafts, arts, industries, languages, and physical characteristics. Linguistic studies are analytical and comparative in scope and cover the Indians of the eastern, southern, and western United States and of Canada. Among the resources of the Bureau are a large manuscript collection, the largest collection in existence of American Indian photographs, and an extensive collection of published materials on the American Indian.

An important unit of the Bureau is the river basin surveys operation, headquartered in Lincoln, Nebraska. The purpose of this activity is the salvage and preservation of archeological materials that will be lost as a result of programs for flood control, irrigation, hydroelectrical, and navigation projects.

Publications of the Bureau include *Bulletins of the Bureau of American Ethnology*; *Anthropological Papers*; *River Basin Surveys* papers; and *Publications of the Institute of Social Anthropology.*

Canal Zone Biological Area

Drawer C
Balboa
Panama Canal Zone
Telephone: 222–2485

The Canal Zone Biological Area, on Barro Colorado Island in the Panama Canal, is a tropical reserve with facilities for scientific research on and observation of plant and animal wildlife by Smithsonian and visiting scientists. The general fields in which basic research is conducted are botany, specifically ecology and taxonomy of indigenous vegetation; zoology, including ecological, taxonomic, physiological, and behavioral studies; and geology, consisting of structural, dynamic, and historical studies of the island. Some meteorological records are maintained. An index of more than 7,000 plant and animal species indigenous to the island is maintained. A branch of the Smithsonian Library is available for reference.

Research results are published in the *Smithsonian Miscellaneous Collections* and outside scientific journals.

National Air Museum

9th and Jefferson Drive SW.
Washington, D.C. 20560
Telephone: 381–5527 (Area code: 202)

The Museum memorializes the development of U.S. aviation and collects, displays, and preserves, for scientific and engineering study, aeronautical objects and equipment of historical significance. The comprehensive exhibitions and study collections record man's conquest of the air from its tentative beginnings to recent achievements by high-altitude aircraft, guided missiles, rockets, and satellites. The principal areas in which the Museum's work is concentrated include flight craft of all types, manned and unmanned, spaceflight vehicles, propulsion and guidance control systems, and related aeronautical materials.

For reference research, the Museum maintains files of U.S. and foreign historical and bibliographical documents, technical manuals and handbooks, drawings, blueprints, a large collection of photographs, and other materials. A unit library of the Smithsonian Library contains material for reference by the staff and visiting researchers.

National Zoological Park

Rock Creek Valley
Adams Mill Road near Ontario Place NW.
Washington, D.C. 20009
Telephone: 265–0743 (Area code: 202)

The National Zoological Park exhibits approximately 2,500 living animals of over 900 different kinds. Investigation is carried on in such fields as the treatment of diseases and the methods of handling exotic wild animals under captive conditions, including the use of drugs for immobilization and anesthesia and technique of treatment using the projectile syringe. Information is supplied on the collections and on the behavior, breeding, care, feeding, and proper handling of captive animals. A unit library of the Smithsonian Library contains materials on mammals; birds; fish; reptiles and amphibians; capture, immobilization, maintenance, and nutrition of wild animals; comparative pathology; microbiology; bacteriology; virology;

Science Information Exchange

209 Madison National Bank Building
1730 M Street NW.
Washington, D.C. 20036
Telephone: 381–5514 (Area code: 202)

The Science Information Exchange is a clearing house for information on scientific research in progress. Government and many non-Government organizations with research programs participate by furnishing timely records of their research tasks that are in progress. SIE does not collect reports, abstracts, or other forms of published research results. It is concerned only with research proposed or in progress and with data for program-management purposes. The Division of Physical Sciences emphasizes basic and applied research in chemistry, physics, mathematics, earth sciences, materials, and electronics. The Division of

Life Sciences is concerned with research projects in the biological, psychological, medical, and sociological sciences.

Investigators associated with recognized research institutions may request information on who is currently working on a specific problem. These questions are answered by a staff of professional scientists who select and forward copies of pertinent *Notices of Research Projects,* which provide the name of the granting agency, the names and addresses of principal and associated investigators, the title and location of the work and a 200-word summary.

Participating agencies engaged in research may receive data on the geographic distribution of research grants, past or present research performed by grant applicants, and extent of work, or general level of research effort, in broad or specific subject fields. Officials of agencies cooperating with SIE may also receive data on the amount and source of financial support in specific subject fields by geographic areas or in other modes of correlation.

There is no charge for these services. Information provided by SIE may not be used for publication or publication reference.

Smithsonian Library

Natural History Building
Constitution Avenue and 10th Street NW.
Washington, D.C. 20560
Telephone: 381–5382 (Area code: 202)

The Library's primary responsibility is to provide the Smithsonian Institution staff with acquisition, catalog, reader, and loan services for its research, curatorial, exhibition, and information programs. The Library maintains in its central and branch libraries, and in its unit libraries, collections of scholarly materials relating to the scientific, historical, and technological fields of interest described for the Smithsonian's subject matter divisions. Library holdings are divided between the half million volumes and parts in the Smithsonian Institution and the "Smithsonian Deposit" of more than a million items housed in the Library of Congress. An 850,000-card union catalog is maintained in the Natural History Building. Resources of the library system are available to the staff and to outside research workers, either on site, through inter-library loan arrangements, or by correspondence. Reference questions are answered by the staff or referred for reply to subject matter specialists within the Institution. Bibliographies are compiled upon request as staff time permits. Arrangements can be made for photocopying and microfilming of library material.

United States National Museum

The largest depository of the national collections, the Museum comprises the Museum of Natural History and the Museum of History and Technology Publications of these two activities include contributions to the *Smithsonian Miscellaneous Collections, Bulletins of the United States National Museum, Proceedings of the United States National Museum,* and special publications.

Museum of History and Technology

Constitution Avenue and 12th Street NW.
Washington, D.C. 20560
Telephone: 381–5452 (Area code: 202)

This museum is the depository of the Nation's historical and technological collections. The specimens, many of them unique and irreplaceable, in the study collections and in the exhibit hall cover the physical sciences; mechanical and civil engineering; transportation; electricity; medical sciences; textiles; ceramics and glass; graphic arts and photography; industrial processes and manufacturing arts; political, cultural, and Armed Forces history; agriculture; philately; and numismatics. Research studies include work on conservation of the collections, identification and history of objects, and the history and development of scientific and technological processes associated with items in the collections. Library services are available through a branch of the Smithsonian Library located in the Museum.

Museum of Natural History

Constitution Avenue and 10th Street NW.
Washington, D.C. 20560
Telephone: 381–5409 (Area code: 202)

Museum staff members undertake worldwide field work and explorations, and specimen collections resulting from this work and from donations present a comprehensive picture of the natural history and anthropology of the world. The Museum operates through its divisions, which specialize in archeology, ethnology, physical anthropology, mammals, birds, reptiles and amphibians, fishes, entomology, marine invertebrates, mollusks, phanerogams, grasses, ferns, cryptogams, plant anatomy, mineralogy, petrology, meteorites, invertebrate paleontology, paleobotany, vertebrate paleontology, and oceanography.

Research based primarily on the collections is carried on by the staff and by visiting scientists and scholars from the United States and other countries. Studies include classification, morphology and anatomy, relationships, variation, evolution, environment, geographic and geologic distribution, life histories, functional and structural adaptations, and geochemistry. Anthropological studies are concerned with racial differentiation of human groups, the cultures and life histories of peoples as groups, and the material cultural achievements of prehistoric peoples.

Library services for this museum are provided by the Smithsonian Library located in the Natural History Building and by unit libraries containing working materials located in the subject divisions.

SOCIETY FOR AMERICAN ARCHEOLOGY

1530 P Street NW.
Washington, D.C. 20005
Telephone: 483-3709 (Area code: 202)

The Society disseminates information, mainly through its publications, on New World and related East Asian archeology. All questions are referred to specialists in the field.

The quarterly *American Antiquity* is obtainable by subscription. *Abstracts of New World Archeology, Memoirs of the Society for American Archeology*, and *Archives of American Archeology* are for sale. A microcard edition of the *Archives* is also available. Back numbers of publications still in print may be purchased.

SOCIETY FOR NONDESTRUCTIVE TESTING

914 Chicago Avenue
Evanston, Ill. 60202
Telephone: 864-2842 (Area code: 312)

A technical association, SNT promotes improved product quality, predictable reliability, and effective process control. It explores technical advances in methods utilizing penetrating radiation, ultrasonics, magnetic particles, eddy currents, fluorescent penetrants, thermographic methods, gaging, and metrology. The Society's library serves as a center for the dissemination of information on these techniques for the nondestructive testing of metals, ceramics, wood, plastics, and components. Holdings consist of books, journals, films and photos, and proprietary information. Foreign literature acquired is in Italian, French, and German.

The collection is available for use by visitors, and reference service is provided. Books and films are loaned to individuals. Photocopying is done for a fee. *Materials Evaluation*, formerly the bimonthly *Nondestructive Testing*, is published monthly and may be obtained on subscription. All volumes since 1942 are for sale on microfilm. Keysort cards, on which technical articles appearing in *Nondestructive Testing* from 1942 to 1958 have been reproduced, coded, and notched, may also be purchased.

SOCIETY OF AMERICAN FORESTERS

704 17th Street NW.
Washington, D.C. 20006
Telephone: 628-1584 (Area code: 202)

The primary activities of this professional society consist of publishing specialized literature and conducting meetings. A small literature collection, however, is maintained at Society headquarters, covering forestry education; forest economics, management, and policy; forest fires; forest products; forest wildlife and range management; silviculture; watershed management; and history of professional forestry. The material is available to the public for on-site use.

Major publications of the Society include the monthly *Journal of Forestry* and the quarterly *Forest Science*, both of which may be obtained by subscription.

SOCIETY OF COSMETIC CHEMISTS

Chemists' Club
52 East 41st Street
New York, N.Y. 10017
Telephone: 679-6382 (Area code: 212)

A professional association, the Society maintains a library of books, journals, and reports on cosmetics and related subjects. Sources in Italian, Spanish, French, and German are included.

The collection is available for on-site reference only. Photocopies are provided. Subscriptions may be obtained to the *Journal of the Society of Cosmetic Chemists.*

THE SOCIETY OF THE PLASTICS INDUSTRY, INC.

250 Park Avenue
New York, N.Y. 10017
Telephone: 687-2675 (Area code: 212)

A trade association, SPI collects and disseminates scientific, engineering, and general information on plastics and develops standards, specifications, and test methods for a wide range of plastics end-use products. A literature collection is maintained of books, journals, reports, and data; it includes plastics publications from Japan, Germany, England, Italy, and Australia.

The Society performs literature searches, provides answers to technical questions, and prepares state-of-the-art reviews. These services are available to all members of the Society and upon request to all Government agencies without charge. Limited information services are available to nonmembers for a fee. The collection is accessible for direct use by approved visitors. There is a charge for document duplication services.

In connection with its annual conference, as well as conferences of certain major divisions held throughout the year, the Society issues proceedings containing papers delivered.

SOCIETY OF VERTEBRATE PALEONTOLOGY

c/o Dr. John A. Dorr, Jr.
Department of Geology
University of Michigan
Ann Arbor, Mich. 48104
Telephone: 663–1511 (Area code: 313)

The Society is an international association of specialists and amateurs in vertebrate paleontology, including history, evolution, comparative anatomy, and taxonomy of vertebrate animals. Inquiries are answered by officers or referred to individual professional members of the Society who will answer questions about their specialties.

SOCONY MOBIL OIL CO., INC.

Field Research Laboratory

Mail:
Post Office Box 900
Dallas, Tex. 75221
Location:
3600 Duncanville Road
Dallas, Tex.
Telephone: 331–6531 (Area code: 214)

The Laboratory library has a specialized collection on petroleum exploration and production, petroleum engineering, and petroleum geology. Material consists of books, journals, reports, patents, maps, and charts.

The library is open to the public by appointment for on-site use.

Paulsboro Laboratory

Socony Mobile Oil Co., Inc.
Paulsboro, N.J. 08066
Telephone: 423–1040 (Area code: 609)

The technical information group at the Paulsboro Laboratory codes and indexes for storage and retrieval Company technical reports and related material; about 7,000 U.S. patents per year concerning petroleum processing, conversion and refining, petrochemicals, product uses, and related technologies; and miscellaneous Government and industry technical reports. Outside services are relied upon to cover nonpatent technical publications and foreign patents. Machine and manual literature searches are performed for any unit of the Company on request. Searches are made occasionally for non-Company agencies, but only after management approval.

Supporting the actvities of the technical information group is a technical library which contains about 16,000 volumes and subscribes to about 450 journals and periodicals. Interlibrary loans are made. The library is open to properly cleared non-Company individuals during working hours by prior appointment.

Several current awareness publications are issued regularly. Those of a nonconfidential nature and the manual for indexing and for machine storage and retrieval are available on request without charge.

Virginia Carolina Chemical Co.

Post Office Box 1136
Richmond, Va. 23208
Telephone: 648–0113 Extension 330 (Area code: 703)

The Company's research and development library, established primarily to serve internal needs, has a collection of books, journals, pamphlets, reports, and patents on agricultural and phosphorous chemistry, as well as on chemical engineering. Foreign literature is in Spanish, French, and German. On-site reference is allowed, and interlibrary loans are made.

SOIL CONSERVATION SERVICE, *See* U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SOCIETY OF AMERICA

7515 North East Ankeny Road
Ankeny, Iowa 50021
Telephone: 266–1321 (Area code: 515)

A nonprofit institution, the Society is an information clearinghouse on soil conservation and such related areas as renewable natural resources and water conservation. Referral service is provided. The *Journal of Soil and Water Conservation,* a bimonthly publication of articles prepared by members of the Society, is available on yearly subscription.

SOLAR ENERGY SOCIETY

Technical Research Science Center

Campus, Arizona State University
Tempe, Ariz. 85281
Telephone: 966–3534 (Area code: 602)

The Center acquires, analyzes, abstracts, and indexes published and other prepared information in the field of solar energy, including research and development and production data. Areas covered are: Solar energy as a source of heat for evaporation processes, space-water heating and absorptive collectors, cooling processes, solar cookers and heat collectors, thermoelectric devices, vapor, hot air, fluid-heat engines, solar furnaces, and thermionic devices; solar energy as a source of light for photochemical processes and photoelectric, photovoltaic, photogalvanic, and piezoelectric effects; and the general aspects of solar energy, including radiation mechanics and availability, economic, social, and cultural parameters of solar energy, accessories, geophysical and meteorological aspects, materials and production, energy storage, historical and foreign aspects, data sources and bibliographies, proceedings, symposia, and meetings. Foreign language publications are in Russian, Italian, Spanish, French, and German.

Information services are available without charge. The Center answers technical questions, performs literature searches, compiles data and reports, and provides a consulting service. Reports and data are reproduced for a fee. No loans are permitted.

Both *Solar Energy,* which contains abstracts, and *Sun at Work* are issued quarterly. They are free to members and available to others on subscription. *The Applied Solar Energy Research* directory and bibliography is published every 5 years.

SOPHIA F. PALMER LIBRARY

American Journal of Nursing Co.
10 Columbus Circle
New York, N.Y. 10019
Telephone: 582–7230 (Area code: 212)

A collection is maintained by the Library on nursing and nursing education, nursing studies and surveys, writing, journalism, and publishing. Included is a special historical collection of out-of-print textbooks. On-site reference privileges only are provided.

The Library is responsible for the annual and 5-year cumulative indexes of two journals, *American Journal of Nursing* (1900 to date) and *Nursing Outlook* (1953 to date), and for the annual and 12-year cumulative index to *Nursing Research* (1952 to date), which includes an index to abstracts of nursing studies. All indexes are published by the American Journal of Nursing Co. The Library also prepares for publication *Reference Cards,* a current index to all articles published in each journal. The cards carry author, title of article, month, year, page, a brief annotation, and suggested subject headings. The Reference Card service is available on a calendar-year subscription basis.

SOUTHERN CALIFORNIA ACADEMY OF SCIENCES

c/o Los Angeles County Museum
900 Exposition Boulevard
Los Angeles, Calif. 90007
Telephone: 748–2194 (Area code: 213)

Established to promote the study of natural features and phenomena and to conserve materials illustrating all phases of science, the Academy has a library covering biology; invertebrate, experimental, and vertebrate zoology; botany; anthropology; geology; and vertebrate and invertebrate paleontology.

The collection is accessible to the public for reference use Inquiries are answered as time permits and should be addressed to the attention of the secretary.

The *Bulletin of the Southern California Academy of Sciences,* issued quarterly, may be obtained by subscription. *Memoirs,* published at irregular intervals, is for sale.

SOUTHERN CALIFORNIA METER ASSOCIATION

1333 Sombrero Drive
Monterey Park, Calif.
Telephone: 689–2656 (Area code: 213)

This professional society prepares and presents papers on fluid measurement and control. Technical questions are answered without charge within the capacity of the members. The Association publishes the *Southern California Meter Association Handbook;* papers and meetings notices are published in *Instruments and Control Systems,* which is available on yearly subscription from Rimbach Publications.

SOUTHERN METHODIST UNIVERSITY

Acoustics Laboratory

Southern Methodist University
Dallas, Tex. 75222
Telephone: 363-5611 Extension 587 (Area code: 214)

Equipped for both teaching and research, the Acoustics Laboratory is part of the Department of Physics. Instrumentation is available for primary and secondary calibrations of microphones, the measurement of the acoustical properties of materials, the study of diffraction and reflection, and the analysis of noise. Research is conducted in the fields of psychoacoustics, industrial hearing and noise, and architectural acoustics. Research results are published in the *Journal of the Graduate Research Center (SMU)*.

Dallas Seismological Observatory

Southern Methodist University
Dallas, Tex. 75222
Telephone: 363-5611 (Area code: 214)

Established by the Dallas Geophysical Society, the Observatory is maintained and operated by the University. Seismological data collected by the Observatory and information pertaining to theoretical seismology are available to the technical community. The *Bulletin of the Observatory* is issued quarterly.

Herbarium

Southern Methodist University
Dallas, Tex. 75222
Telephone: 363-5611 (Area code: 214)

The Herbarium contains approximately 250,000 specimens of plants from all over the world, particularly from the southern United States. Associated with the Herbarium are the Torrey Club Card Index to new species and a library of systematic botany, including nearly all the works of Linnaeus. Languages represented in the library's holdings are English, French, Italian, Spanish, German, and Russian. Reference, document, and consulting services are available to all interested persons without charge.

Science Library

Southern Methodist University
Dallas, Tex. 75222
Telephone: 363-5611 (Area code: 214)

The Science Library has a specialized collection on the sciences, mathematics, and engineering. Material is acquired from sources in English, French, German, Italian, Spanish, and Russian. As a U.S. Regional Technical Report Center serving Texas, Louisiana, and Oklahoma, the Library is a depository for reports issued by the U.S. Atomic Energy Commission, the National Aeronautics and Space Administration, the Department of Defense, and other Government agencies and their contractors.

The collection is open to the public for reference use. Interlibrary loans are made.

SOUTHERN RESEARCH INSTITUTE

2000 Ninth Avenue, South
Birmingham, Ala. 35205
Telephone: 323-6592 (Area code: 205)

The Institute conducts research in organic, inorganic, physical, analytical, and radiochemistry; physics, specifically solid state devices; chemical, mechanical, and electrical engineering; metallurgy; biochemistry; and biology. Books, journals, reports, and patents in these fields are acquired by the Institute's library; foreign language sources are in French, German, Italian, Spanish, and Russian.

The collection is available for on-site use, and reference service is provided.

SPACE SCIENCE BOARD, *See* NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

SPACE TECHNOLOGY LABORATORIES, *See* TRW SPACE TECHNOLOGY LABORATORIES

SPOKANE MINING RESEARCH LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

SQUIBB INSTITUTE FOR MEDICAL RESEARCH, *See* OLIN MATHIESON CHEMICAL CORPORATION

STANDARD ULTRAMARINE & COLOR CO.

Fifth Avenue and 24th Street
Huntington, W. Va.
Telephone: 529-1311 (Area code: 304)

The Company library acquires and processes material on general chemistry, pigments and dyestuffs, printing inks, paints, and chemical engineering. It serves primarily the technical personnel of the Company and is not open to the public, but will occasionally serve others if the information sought is not available in any of the public institutions in the Huntington area; special permission is required in each case.

STANFORD RESEARCH INSTITUTE

333 Ravenswood Avenue
Menlo Park, Calif. 94025
Telephone: 326–6200 (Area code: 415)

Founded by the trustees of Stanford University at the request and with the cooperation of leaders in western industry, the Stanford Research Institute conducts contract research for business and Government in economics, engineering, and the physical and life sciences. International studies in these disciplines constitute a considerable portion of SRI efforts. Representative research programs include energy studies, atmospheric studies, space research, nuclear and atomic sciences, high-temperature technology, metals, natural resources, materials and processes, foods, agriculture, health sciences, analytical chemistry, and electronic economics.

Project reports provide the client with analyses and interpretation of data obtained from field work, from research capabilities, from the Institute's files, and from specialists throughout the Institute in the particular fields involved. At the conclusion of each project, oral reports are generally given to supplement the written reports.

Library Services Department

In support of SRI research activities, the Library Services Department acquires and maintains books, journals, reports, patents, films and photos, maps and charts, and security information relating to engineering, physical sciences, life sciences, economics, and management research. The collection consists of both domestic and foreign publications in English, Russian, Italian, Spanish, French, and German. On-site use of material is permitted, and interlibrary loans are made. Branch offices are maintained in Detroit, Mich.; New York, N.Y.; South Pasadena, Calif.; Fort Ord, Calif.; Washington, D.C.; Honolulu, Hawaii; Zurich, Switzerland; and Tokyo, Japan.

Long-Range Planning Service Information Center

The purpose of the Long-Range Planning Service is to identify, monitor, and analyze change and evaluate what it means to business and industry. Trends are forecast in all fields involving technological, economic, marketing, and social changes occurring throughout the world. Reports are published annually, each of which reviews concisely a specific area of change and its implications for long-term company planning. Clients may arrange consultations with staff members or telephone them for information on published reports.

An Information Center has been established as a collecting point for intelligence on change. The files include data on anticipated changes as well as backup materials for published reports. Information is available to clients through personal visits or correspondence.

Research Information Center

The Research Information Center serves as a clearinghouse for the exchange of information and issues publications on SRI research in economics, including national, public, and private components, foreign trade and investment, and major industries and components; and research on the chemical industry, including performance, product groups, chemicals, companies, producers, and processes.

The *Chemical Economics Newsletter* and the *Industrial Economics Handbook Newsletter,* distributed bimonthly, are free on request. Publications available by subscription include the annual *Process Economics Program; Chemical Economics Handbook,* issued bimonthly; the monthly *Directory of Chemical Producers;* and *Industrial Economics Handbook,* a bimonthly.

Subscribers may request information to supplement that contained in the publications. Each request is reviewed individually and the information provided upon approval without additional charge. Special subscription rates are considered for educational, nonprofit, and Government organizations.

STANFORD UNIVERSITY

Branner Geological Library

Stanford University
Stanford, Calif. 94305
Telephone: 321–2300 Extension 2746 (Area code: 415)

The Library houses literature collections on geology, crystallography, paleontology, geophysics, geochemistry, invertebrate paleozoology, including conchology, mining, and metallurgy, as well as geological maps and the U.S. Geological Survey topographical sheets.

All are welcome to make in-library use of materials. However, only Stanford faculty, staff, and students and those who have obtained special borrowers' cards may take materials out on loan.

Falconer Biology Library

Stanford University
Stanford, Calif. 94305
Telephone: 321–2300 Extension 2418 (Area code: 415)

Holdings consist of general publications in botany and zoology and specialized materials in experimental fields. The Library of the Division of Systematic Biology, a branch library, has collections in systematics, natural history, and entomology, and special collections on the flora of western North America.

All are welcome to make in-library use of the collections, but loans are made only to holders of Stanford University cards. Circulating materials are available through interlibrary loan.

Lane Medical Library

Stanford University
300 Pasteur Drive
Palo Alto, Calif. 94304
Telephone: 321–1200 (Area code: 415)

All aspects of medicine are covered by the Library, with special collections in anatomy, medical microbiology, ophthalmology, otolaryngology, and medical history. Books and journals in all major languages are acquired.

Use of the collections is subject to the payment of a fee by persons other than staff and students of Stanford.

Physics-Mathematics-Statistics Library

Stanford University
Palo Alto, Calif. 94305
Telephone: 321–2300 Extension 4343 or 4342 Area code: 415)

Holdings consist of books, journals, and reports on all phases of physics, mathematics, and statistics, with emphasis on the graduate and research level. Literature in all major languages is represented.

Material is available on loan to University faculty, students, and staff and to others who fulfill requirements for use of Stanford libraries. Journals are not circulated on interlibrary loan.

Stanford Electronic Laboratories

Stanford University
Stanford, Calif. 94305
Telephone: 321–2300 Extension 343 (Area code: 415)

Reports on experiments conducted by the Laboratories are maintained in a Document Library. Areas of research are solid state physics, systems theory, electron devices, and radio science. Documents are available without charge to the engineering departments of colleges and universities and to facilities under contract to the U.S. Government.

Stanford Linear Accelerator Center

Mail:
Stanford University
Post Office Box 4349
Stanford, Calif. 94305

Location:
Stanford University
Palo Alto, Calif.
Telephone: 321–2300 (Area code: 415)

Under contract with the U.S. Atomic Energy Commission, the Center is designing and constructing a 20-Bev accelerator which will be operational in 1966–67. When completed, the facilities will be operated by Stanford for use by qualified scientists from all over the world for research in very-high-energy physics.

The Center's library has a collection of books, journals, and reports in all major languages on accelerator technology and high-energy physics. The materials are available for on-site reference and for limited interlibrary loan. Public information and publications concerning the Center are disseminated by the Technical Information Office, which collects reports, patents, films and data, and films and photos relating to the accelerator. Literature prepared by the Information Office is available without charge and reference services are provided.

Swain Library of Chemistry

Stanford University
Stanford, Calif. 94305
Telephone: 321–2300 Extension 2511 (Area code: 415)

The Library provides coverage in organic chemistry, particularly carbohydrates, proteins, steroids, and terpenes; colloidal and surface chemistry; structural inorganic chemistry; high polymers; spectrometric methods; biochemistry; and electrochemistry. Only token coverage is given to applied industrial chemistry and agricultural fluorine and radiation chemistry.

Material is available free to the public for on-site reference, and interlibrary loans are made for a specific fee through the Stanford Technical Information Service. Photocopies are provided.

Technical Information Service

Stanford University
Stanford, Calif. 94305
Telephone: 321–2300 (Area code: 415)

Utilizing the library facilities at Stanford University, the Technical Information Service provides reference and document services for a fee in all fields of science and technology to industrial subscribers within a 20-mile radius of Stanford.

STATE MEDICAL SOCIETY OF WISCONSIN

330 East Lakeside Street
Madison, Wis.
Telephone: 256–3101 (Area code: 608)

The Society provides postgraduate programs in medicine; a scientific speakers service; scientific loan packets; health educational materials in the form of literature, films, and radio programs; a physician placement service; and a health information service. Postgraduate and scientific medical materials, including specialized guides to assist in medical and public health activities, are made available only to physicians. Public health educational materials and public health services are furnished to the public free or at nominal cost.

The *Wisconsin Medical Journal* is distributed free to members and may be obtained by others on subscription.

STEEL FOUNDERS' SOCIETY OF AMERICA

606 Terminal Tower
Cleveland, Ohio 44113
Telephone: 621–7350 (Area code: 216)

Supported by approximately 120 steel foundries in the U. S. and Canada, and affiliated with the Steel Foundry Research Foundation, the Society collects and distributes technical, marketing, and management material on the manufacture, sale, and properties of steel castings and on foundry practice. New products are evaluated and the results published.

Information services, some of which are available only to member companies, include loan of books, journals, reports, films, and photographs, as well as technical consultations on specific problems. Requests for reports from nonmembers are reviewed individually. The Society also issues handbooks, manuals, special research reports, conference proceedings, and standards and specifications, some of which are available for sale. Circulation of certain publication is restricted to members.

Journal of Steel Casting Research, a quarterly, contains a section of "Abstracts of Fundamental Papers on Steel Casting Research." The Society also issues *Steel Foundry Facts*, which appears 10 times a year and contains a section of "Steel Casting Abstracts."

STEIN ENGINEERING SERVICES, INC.

5602 East Monte Rosa
Phoenix, Ariz. 85018
Telephone: 945–4603 (Area code: 602) TWX 949–0180

Stein Engineering Services functions as an information center on strain gages and their applications to industrial, military, and research problems; instrumentation for stress analysis; strain gage techniques; photoelastic methods; brittle coatings; structural adhesives; sliprings and rotating telemetry units; mechanical and electrical properties of materials; transducers based on resistance strain gages; instruments; circuits for strain measurements and transducers; and static, dynamic, and transient stress analysis theory.

Literature searches, bibliographies, special reference material, and state-of-the-art review summaries on measuring techniques, primarily in the stress analysis and transducer fields, are provided. Technical translations from German or French are made on request. Fees are charged for these services.

Strain Gage Readings, a review and digest of current literature, is distributed bimonthly to subscribers. The *Strain Gage Encyclopaedia* and *Measurement Engineering* are for sale.

STOW MANUFACTURING CO.

578 Shear Street
Binghamton, N.Y. 13902
Telephone: 723–6411 (Area code: 607)

A manufacture of flexible shafts, concrete equipment, and valve remote control systems, Stow Manufacturing Co., maintains a literature collection of books and catalogs, provides consulting services, and establishes standards and specifications.

The following publications are available without charge: *Flex-Shaft Newsletter*, issued six times a year; *Concrete Newsletter*, issued twice a month; *Flexible Shaft Engineering Handbook; Design Manual on Valve Remote Control Systems; Stow Concrete Equip-*

ment; Catalog 63, Flexible Shaft Machines; Bulletin 5922, How to Grind Concrete; and *Bulletin 613, How to Strike off Concrete by Vibration Screeding.*

STRAUB CLINIC

888 South King Street
Honolulu, Hawaii 96813
Telephone: 5–3311 (Area code: 808)

A private medical institution, the Straub Clinic maintains a library on medicine and surgery, including nuclear medicine, radiology, and pathology. The collections are not highly specialized in specific subdisciplines. Material is acquired in English, Spanish, and French.

The library is primarily for use by the clinic's staff, but other physicians and scientific personnel are permitted access. Requests for information are handled on their individual merits and as time permits. A photocopying service is available.

The *Straub Clinic Proceedings,* published monthly, is available upon request to physicians and other interested persons anywhere without charge.

STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA

417 Market Street
San Francisco, Calif. 94105
Telephone: 362–1721 (Area code: 415)

A statewide professional society, the Association maintains a collection of information on structural engineering, the effect of earthquakes on buildings, seismology, and building design and materials. It establishes standards and specifications. All bona fide technical inquiries are answered. Publications issued include technical reports and conference proceedings. Examples are *Recommended Lateral Force Requirements and Commentary,* available for purchase, and *Earthquake Effect on Buildings,* a simplified exposition booklet.

P. A. STURTEVANT CO.

120 East Lake Street
Addison, Ill. 60101
Telephone: 834–2000 (Area code: 312)

Laboratory Division
333 West First Street
Elmhurst, Ill. 60127

A manufacturer of torque wrenches and related products, the Company provides information on torque control devices and their use, and conducts laboratory studies of fastener applications, particularly torque-tension relationships. Literature and data are acquired from various sources, and no limitations apply to the use of the information that has been compiled.

SULPHITE PULP MANUFACTURERS' RESEARCH LEAGUE

Mail:
Post Office Box 436
Appleton, Wis. 54910
Location:
1043 East South River Street
Appleton, Wis.
Telephone: 734–9251 (Area code: 414)

Established as a cooperative research effort in developing processes for utilization or disposal of spent sulphite liquor to avoid water pollution, the League is supported by sulphite pulp manufacturers. Its library collects, indexes, abstracts, and translates worldwide literature on spent sulphite liquor, wood chemicals and byproducts, and water pollution problems of the pulping industry from sources in English, Russian, Italian, Spanish, French, German, and the Scandinavian languages.

Information services are primarily for member mills, but requests for nonrestricted data from outside inquirers are met as time and cost limitations permit.

An annotated bibliography, issued as annual supplements, is available for purchase, as are 5-year composite supplements since 1940.

SULPHUR INSTITUTE

1725 K Street NW.
Washington, D.C. 20006
Telephone: 337–8660 (Area code: 202)

Sponsored by producers of sulphur and pyrites, the Institute functions as an information center on scientific, technical, economic, and statistical data related to sulphur utilization in industry and agriculture, chemistry, engineering, agronomy, soil science, entomology, and fertilizer technology. The medicinal-pharmaceutical area is largely excluded. Acquisitions are made of material in English, Russian, Italian, Spanish, French, German, and the Scandinavian languages. The collection is available to the public for on-site reference only.

SUMMIT RESEARCH LABORATORIES, *See* CELANESE CORPORATION OF AMERICA

SUN OIL CO.

Research and Development Library

Marcus Hook, Pa. 19061
Telephone: 485–1121 (Area code: 215)

Holdings consist of books, journals, reports, patents, films and photos, data, and nonprinted material on petroleum chemistry, organic fuels, organic chemistry, catalysis, chemical marketing, chemical engineering, chemical products and process development, physics, mathematics, and microbiology. Special coverage in agricultural chemicals and bacterial contamination of petroleum is provided through the acquisition of current journals in these fields. There is a card file of American Petroleum Institute abstracts. Copies of translations performed by the Library are sent to the John Crerar Library in Chicago.

The collection is open for on-site use to students and researchers upon application. Interlibrary loans are available. All written inquiries should be addressed to the Sun Oil Co., 1608 Walnut Street, Philadelphia, Pa., 19103.

SUTHERLAND CRANIAL TEACHING FOUNDATION, INC.

660 Washington Street
Denver, Colo. 80203
Telephone: 825–8350 (Area code: 213)

An affiliate of the Cranial Academy, the Academy of Applied Osteopathy, and the American Osteopathic Association, the Foundation is dedicated to perpetuating the osteopathic discovery of Dr. William G. Sutherland. Dr. Sutherland developed the cranial concept, which is an analysis of the movements found in the four intrinsic parts of the cranio-sacral mechanism. For a fee, technical books and courses of instruction are made available to members of the medical, dental, and osteopathic professions. Brochures and pamphlets are available to anyone gratis in moderate quantities.

SYSTEMATIC BACTERIOLOGY RESEARCH GROUP, *See* IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

SYSTEM DEVELOPMENT CORP.

2500 Colorado Avenue
Santa Monica, Calif. 90406
Telephone: 393–9411 (Area code: 213)

A nonprofit organization, SDC is engaged in research and development in data processing, mathematics, computer system design, man-machine relationships, logistics, psychology, theories of education, management, economics, political science, operations research, information retrieval, and command and control systems. Technical consultations to solve specific problems within this scope are handled by contract.

The Corporation's library consists of material in English, Spanish, Italian, German, French, and Russian. Requests of an open literature nature are answered as time permits by correspondence and by sending copies of publications free of charge. Significant documents produced by SDC that are available outside the Corporation are announced in the *TAB* bulletin issued by the Defense Documentation Center, Cameron Station, Alexandria, Va., 22314, and in *U.S. Government Research Reports*, issued by the Office of Technical Services, U.S. Department of Commerce, 20234.

TECHNICAL ADVISORY SERVICE FOR LAWYERS

1528 Walnut Street
Philadelphia, Pa. 19102
Telephone: 545–8525 (Area code: 215)

The Service provides, for a fee, specialists in all areas of science and technology who will serve in court cases or for short-term projects. Special areas includes fires, falls, building damage, machine-caused injuries, traffic accidents, maritime accidents, ballistics and chemical problems; and electrical and aviation accidents. Services in actuarial analysis, graphic presentation, construction evaluation, and photography are also available.

TECHNICOLOR CORP.

2800 West Olive Avenue
Burbank, Calif. 91505
Telephone: 849–2495 (Area code: 213)

In support of its photographic research laboratory, the Corporation maintains a library of books, journals, and patents in the areas of photographic processes, especially cinematography; electronic equipment for photographic processes and for data and information recording; color; organic chemistry; and optics.

The library is available to the public by means of interlibrary loan. Limited on-site reference use may be requested.

TEMPIL CORP.

132 West 22d Street
New York, N.Y. 10011
Telephone: 675–6610 (Area code: 212)

A manufacturer of temperature-indicating materials and refractory paints and coatings for high-temperature service, the Corporation is an information resource for data on melting points, the physical and chemical characteristics of compounds in the melted state, and temperature measurement and indication. A collection of books, journals, reports, patents, charts, and data, with the exception of proprietary material, is made available to anyone. Technical bulletins, data tables, and metallurgical charts are distributed free.

TENNESSEE VALLEY AUTHORITY

Technical Library

500 Union Avenue SW.
Knoxville, Tenn. 57902
Telephone: 522–7181 (Area code: 615)

Wilson Dam, Ala.
Telephone: 383–4631 (Area code: 205)

Chattanooga, Tenn.
Telephone: 265–3551 (Area code: 615)

The TVA Technical Library is an official depository for copies of all reports, studies, reprints, and other similar materials originating in TVA. It is also a depository for copies of these and dissertations resulting from TVA research. Holdings comprise other literature, maps, and data relating to agronomy, including fertilizer evaluation and soil chemistry; medicine and biology, including aquatic biology, mosquito control, stream pollution control, air pollution control; forestry, including forest management and utilization; chemistry, specifically fertilizer products and processes; engineering, including civil, electrical, mechanical, chemical, and nuclear; hydraulics; hydrology; geology; architecture; meteorology; mathematics, including the use of computers; and agricultural and forest economics.

Materials are available for use in the Knoxville library and at the two branch libraries; interlibrary loans are made.

TEXAS A. & M. UNIVERSITY

Chemical Thermodynamic Properties Center

Texas A. & M. University
College Station, Tex. 77843
Telephone: 846–8765 (Area code: 713)

Affiliated with the National Bureau of Standards National Reference Data Program, the Chemical Thermodynamic Properties Center is responsible for two projects: the American Petroleum Institute Research Project 44 on Selected Values of Properties of Hydrocarbons and Related Compounds and the Manufacturing Chemists Association Research Project on Selected Values of Properties of Chemical compounds. The API research effort consists in the compilation, analysis, and evaluation of data on hydrocarbons and related compounds, covering physical properties, thermodynamic properties, and spectral properties, including infrared, ultraviolet, Raman, mass, and nuclear magnetic resonance spectra. The MCA research project is an identical operation, except that data are collected, analyzed, and evaluated on chemical compounds that are not hydrocarbons.

Looseleaf data sheets on each project are issued semiannually and distributed free to educational institutions and Government research laboratories on payment of a handling charge; they are available on a subscription basis to member companies of the American Petroleum Institute or the Manufacturing Chemists Association, respectively. Separate volumes on the physical and thermodynamic data of hydrocarbons and nonhydrocarbons are in preparation.

Cottonseed Products Research Laboratory

Texas A. & M. University
Free Express Box 224
College Station, Tex. 77843
Telephone: 846–5117 (Area code: 713)

The Laboratory conducts research aimed at improved processing methods and new and improved uses of cottonseed and cottonseed byproducts. A collection of books, journals, reports, and data is available for on-site reference; some loans are made. Reports and other publications issued by the Laboratory are for general distribution. Consulting services are provided for a fee.

Cushing Memorial Library

Texas A. & M. University
College Station, Tex. 77843
Telephone: 846–5717 (Area code: 713)

This is the central library for the University's library system, which provides coverage in all fields of agriculture; veterinary medicine; all fields of engineering, including nuclear; computer science; business administration, architecture; and military science. Humanities and the social sciences are also represented, but emphasis is placed on the pure and applied sciencies. The Library is a depository for the U.S. Atomic Energy Commission and is a selective depository for other Government documents.

Materials are available for on-site reference and through interlibrary loan.

Texas Agricultural Experiment Station

Texas A. & M. University
College Station, Tex. 77843
Telephone: 846–8861 (Area code: 713)

The Station, with its 29 field stations, conducts research on agriculture, agricultural economics, home economics, agricultural engineering, animal science, biochemistry, nutrition, molecular biology, dairy production, food technology, poultry science, entomology, plant physiology and pathology, genetics, range sciences, forestry, soil and crop science, veterinary medicine, and economic zoology. Requests for information are answered, and single copies of publications are provided without charge. These include the bimonthly *Texas Agricultural Progress* and bulletins, leaflets, progress reports, and miscellaneous publications issued at irregular intervals.

Texas Engineering Experiment Station

Texas A. & M. University
College Station, Tex. 77843
Telephone: 846–4701 (Area code: 713)

The station conducts laboratory and field research in all major fields of engineering. Research results are published in the form of technical reports, which are available at a nominal cost.

TEXAS INSTRUMENTS, INC.

Corporate Technical Information Center

Post Office Box 5474
13500 North Central Expressway
Dallas, Tex. 75222
Telephone: 235–3111 Extension 1407 (Area code: 214)

The Center has a collection of books, journals, and reports on electronics, electronic systems and components, semiconductor materials, solid state physics and chemistry, solid state devices, electro-optics, optical instruments, and earth and space sciences. Foreign literature includes material in Russian, French, and German.

The Center makes literature searches, prepares state-of-the-art reviews, compiles bibliographies and answers technical questions. Books and periodicals are circulated on interlibrary loan.

TEXAS MEDICAL CENTER LIBRARY

Houston, Tex. 77025
Telephone: 529–3808 (Area code: 713)

The Library serves the entire medical population of Harris County. It houses the collections of the Houston Academy of Medicine, the Baylor University College of Medicine, and the Houston Academy of Dentistry. Holdings include books on medicine, dentistry, nursing, and related subjects. There are special collections on gout, arthritis, rheumatism, and public health.

The Library is open to outsiders on a limited basis; reference and interlibrary loan services are provided. A photocopying service is available.

TEXAS PETROLEUM RESEARCH COMMITTEE, *See* THE UNIVERSITY OF TEXAS

TEXTILE RESEARCH INSTITUTE

601 Prospect Avenue
Princeton, N.J. 08541
Telephone: 924–3150 (Area code: 609)

The Institute maintains a literature collection to support research in textiles and high polymers. Books and reports in English, Russian, Italian, Spanish, French, and German are acquired. Consulting and document services are available without charge.

The monthly *Textile Research Journal* may be obtained by subscription.

TEXTRON, INC.

Spencer Kellogg Division

4201 Genesee Street
Buffalo, N.Y. 14225
Telephone: 582–5850 (Area code: 716)

The Division manufactures chemical products, linseed oil and other oilseed products, as well as raw materials for paints and varnishes. Its research center library has a collection of books, manuals, reports, patents, and data relating to organic chemistry, resins, and fats and oils.

The library is for the use of company personnel, but special services are occasionally provided to local technical libraries or other organizations.

THERMOPHYSICAL PROPERTIES RESEARCH CENTER, *See* PURDUE UNIVERSITY

TIBURON MARINE LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE

TRACE LEVEL RESEARCH INSTITUTE, *See* PURDUE UNIVERSITY

TRANSDUCER INFORMATION CENTER, *See* BATTELLE MEMORIAL INSTITUTE

TROPICAL HEALTH OFFICE, *See* NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

TROXLER ELECTRONICS LABORATORIES, INC.

3048 Medlin Drive
Raleigh, N.C. 27607
Telephone: 832–7565 (Area code: 919)

The Laboratories conduct research and compile information on the measurement of moisture and density of engineering materials, including asphalt density and asphalt content, by isotope techniques; on production test equipment; and on special nuclear and electronic measuring devices.

Technical questions are answered without charge. Research findings are disseminated by means of technical reports, to which reference service is provided.

TRW SPACE TECHNOLOGY LABORATORIES

One Space Park
Redondo Beach, Calif. 90277
Telephone: 679–8711 (Area code: 213)

The TRW Space Technology Laboratories design and manufacture spacecraft systems and subsystems and are since 1954 responsible for systems engineering and technical direction of U.S. Air Force ballistic missiles programs Thor, Atlas, Titan, and Minuteman. A research library of books, journals, and reports is maintained on space aeronautics, plasma physics, cryogenics, and inorganic chemistry. Foreign literature in Russian, French, and German is collected.

The library is available for use by company personnel and Government agencies and their contractors. Materials may also be borrowed on interlibrary loan. *Research Bibliographies* and a *Weekly Accessions List* issued by the library are available to qualified U.S. Department of Defense, AEC, and NASA contractors.

TUCSON METALLURGY RESEARCH LABORATORY, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

TUSCALOOSA METALLURGY RESEARCH CENTER, *See* U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF MINES

UICSM MATHEMATICS PROJECT, *See* UNIVERSITY OF ILLINOIS

ULTRA-VIOLET PRODUCTS, INC.

5114 Walnut Grove Avenue
San Gabriel, Calif. 91778
Telephone: 283–3193 (Area code: 213)

A commercial research and manufacturing organization, Ultra-Violet Products investigates ultraviolet light sources and their application to the development of lamps and fluorescent materials. Books, journals, and reports are collected on ultraviolet and black light and fluorescent materials and related equipment. Chemicals, inks, and additives are manufactured for use with ultraviolet lamps.

Consulting services are provided to the public for a fee. Product research results are disseminated in technical reports, available free upon request.

UNITED AIRCRAFT CORP.

Research Library

400 Main Street
East Hartford, Conn. 06108
Telephone: 528–4811 (Area code: 203)

Corporation laboratory research is supported by the Library's collection of books, journals, and reports on aeronautics; aircraft and rocket engines; combustion; electronics; fluid mechanics; fuels and propellants; heat transfer; instrumentation and testing; machine elements; materials, including metals and nonmetals; plasma physics; solid state physics; space technology; applied mechanics; energy-conversion devices; and nuclear engineering.

Unclassified and nonproprietary information is available to the scientific and technical community associated with educational institutions through interlibrary loan. Direct loan library services are available only to personnel of the United Aircraft Corp., its divisions and subsidiaries.

UNITED NUCLEAR CORP.

5 New Street
White Plains, N.Y. 10601
Telephone: 948–5800 (Area code: 914)

Research and development projects of the Corporation are supported by a library, which disseminates information on nuclear engineering, nuclear propulsion, high-temperature materials, nuclear physics, and mathematics. The collection consists of books, journals, patents, films and photos, maps and charts, data, and nonprinted material. The report collection includes documents issued by the U.S. Atomic Energy Commission, the National Aeronautics and Space Administration, and the U.S. Department of Defense. Foreign sources are in Russian, Italian, Spanish, French, and German.

Reference use is permitted by appointment only. Material is available on interlibrary loan.

U.S. ATOMIC ENERGY COMMISSION

Division of Technical Information

Germantown Headquarters Building
Washington, D.C. 20545
Telephone: 973–4426 (Area code: 301)

The Division of Technical Information administers AEC programs for the dissemination of classified and unclassified scientific information; develops AEC-wide policies, standards, and procedures for technical information services and appraises the technical information programs of operations offices; administers the operation of the Division of Technical Information Extension at Oak Ridge, Tenn., which provides central AEC publishing, reference, document collection, and standard and special distribution services.

Division of Technical Information Extension

U.S. Atomic Energy Commission
Post Office Box 62
Oak Ridge, Tenn. 37831
Telephone: 483–8611 (Area code: 615)

The Division of Technical Information Extension maintains the AEC master collection of technical reports and other literature, prepares and disseminates bibliographic and reference tools, serves as a clearinghouse for the acquisition and distribution of AEC and non-AEC atomic energy literature, and provides centralized publishing services. Technical reports deposited by the AEC and its contractors consist of topical or final reports, which contain accounts of completed investigations on a specific subject, and progress reports, which summarize the results of work on particular projects at periodic intervals. In addition to these documents, the DTI Extension acquires reports from all countries actively engaged in atomic energy research and development. The Division also collects translations of atomic energy literature in foreign languages produced under AEC contract. A depository library system, currently consisting of 96 domestic depositories in most States of the United States and 88 foreign depositories, is maintained. The primary objective of this system is to insure that unclassified technical reports are available for reference use. A current list of depository libraries appears in each issue of *Nuclear Science Abstracts.*

Handbooks, monographs, and other reference works issued by the AEC on various aspects of nuclear science and technology are listed in *Technical Books and Monographs Sponsored by the United States Atomic Energy Commission,* which is available from the DTI Extension. *Technical Progress Reviews,* issued quarterly in series, digest and evaluate significant development in selected areas of nuclear science and technology. They may be obtained by Government agencies and contractors, depository libraries, and other official users in limited quantities without charge from the DTI Extension and are sold on individual-issue and annual subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Several abstract journals, indexes, and other specialized bibliographic aids are prepared and issued by the AEC. *Nuclear Science Abstracts,* a semimonthly publication, provides worldwide coverage of unclassified literature in nuclear science and engineering and includes the unclassified technical reports of the AEC and its contractors. U.S. Government agencies may obtain *NSA* from the DTI Extension through official channels; it is available to the public from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Corporate author, personal author, subject, and report number indexes to *NSA* are provided, as well as cumulative indexes. Availability to the public is announced in *What's Available in the Atomic Energy Literature,* obtainable from the DTI Extension. Engineering drawings and specifications prepared as part of the design, engineering, and construction phases of the atomic energy program are announced in *Engineering Materials List* and its supplements, available free from the DTI Extension. At frequent intervals, the DTI Extension issues an *Informal Listing of Bibliographies of Atomic Energy Literature*, announcing bibliographies and literature searches prepared by the DTI Extension, AEC contractors, and other organizations. Requests may be made for placement on the distribution list. Another informal listing, also issued irregularly and obtainable on request, is the *U.S. AEC Translation List*, announcing completed translations received by the DTI Extension, as well as translations in process.

Films available on loan to educational and nonprofit organizations are listed in two catalogs: *Motion Picture Film Library—Popular Level* and *Motion Picture Film Library—Professional Level*. Both are available without charge from the DTI Extension and from the Audi-Visual Branch, Division of Public Information, U.S. Atomic Energy Commission, Washington, D.C., 20545.

Radiological Physics and Instrumentation Branch

U.S. Atomic Energy Commission
Division of Biology and Medicine
Germantown, Md. 20545
Telephone: 973–5355 (Area code: 301)

With emphasis on commercially available radiation instruments, the Branch supplies data on nuclear radiation detection and measuring instruments, the type of radiation a given instrument will detect, and upon the suitability of specific instruments for establish monitoring procedures and methods. It furnishes circuit diagrams and servicing information as well as performance data for a wide variety of makes and models and obtains from other sources information on old and obsolete instruments not immediately at hand. Information can also be obtained on military and civil defense type radiation monitors, as well as on component parts for maintenance.

All inquiries are handled free and, in most cases, on an unclassified basis.

U.S. COAST GUARD, *See* U.S. DEPARTMENT OF THE TREASURY

U.S. DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

Marketing Information Division

Agricultural Marketing Service
U.S. Department of Agriculture
14th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–2515 or 388–4407 (Area code: 202)

The Marketing Information Division administers a comprehensive marketing information program necessary to meet requirements of the overall programs and activities of the Agricultural Marketing Service. The Division formulates and executes policies and programs to carry out the Service's legal responsibility for disseminating information on food distribution, marketing research, regulatory, and marketing service work.

The Division has branch offices at the following addresses:

50 Seventh Street NE.
Room 239
Atlanta, Ga. 30323

536 South Clark Street
2d Floor
Chicago, Ill. 60605

500 South Ervay Street
Room 3–107
Dallas, Tex. 75201

346 Broadway
Room 624
New York, N.Y. 10013

630 Sansome Street
Room 702
San Francisco, Calif. 94111

Market Quality Research Division

U.S. Department of Agriculture
Federal Center Building
Prince Georges Plaza
Hyattsville, Md.
Telephone: 388–8695 (Area code: 202)

This Division of the Agricultural Marketing Service conducts studies on measuring and identifying quality characteristics useful in the grading and inspection of agricultural commodities and in research on protecting the quality of the commodity in marketing channels from deterioration and damage from insects, diseases, and other hazards that occur. Work is done at Beltsville, Md., in Washington, D.C. near the headquarters office, and at 20 field locations. The Beltsville laboratories include the Instrumentation Research Laboratory, the Post-Harvest Pioneering Research Laboratory, and the largest concentration of workers of the Horticultural Crops Branch and of the Field Crops and Animal Products Branch.

The Division does not provide reference or document services, nor does it supply publications, but prepares manuscripts which are published as USDA publications and in various outside journals. It provides specialized sources of information and consulting services and makes available the results of its research to the public without charge. Requests may be directed to the Division's headquarters office or to any of the following field locations:

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
440 South Thomas Street
Pomona, Calif. 91769
Telephone: 622–5061 (Area code: 714)

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
2120 Camden Road
Orlando, Fla. 32803
Telephone: 424–5693 (Area code: 305)

Market Pathology Laboratory
U.S. Department of Agriculture
Belle Mead, N.J.

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
13601 Cutler Road
Miami, Fla. 33158
Telephone: 235–0321 (Area code: 305)

Stored-Product Insects Branch
Market Quality Research Division
U.S. Department of Agriculture
520 North Juliette
Manhattan, Kans. 66502
Telephone: 778–2535 (Area code: 913)

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
Lon Hill Park
Harlingen, Tex. 78551
Telephone 423–4228 (Area code: 512)

Stored-Product Insects Branch
Market Quality Research Division
U.S. Department of Agriculture
5578 Air Terminal Drive
Fresno, Calif. 93727
Telephone: 251–7544 (Area code: 209)

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
2021 South Peach Avenue
Fresno, Calif. 93702
Telephone: 255–0203 (Area code: 209)

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
Red River Valley Potato Research Center
East Grand Forks, Minn. 56921
Telephone: 773–1175 (Area code: 218)

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
536 South Clark Street
Chicago, Ill. 60605
Telephone: 828–6678 (Area code: 312)

Field Crops and Animal Products Branch
Market Quality Research Division
U.S. Department of Agriculture
Clemson College
Clemson, S.C. 29631
Telephone: 654-2938 (Area code: 803)

Field Crops and Animal Products Branch
Market Quality Research Division
U.S. Department of Agriculture
Texas A. & M. College
College Station, Tex. 77843
Telephone: 846–4322 (Office) (Area code: 713

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
Maine Potato Handling Research Center
Presque Isle, Maine 04769
Telephone: 762–8281 (Area code: 207)

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
North Carolina State College
Raleigh, N.C. 27607
Telephone: 834–5211 Extension 318 (Area code: 919)

Field Crops and Animal Products
Market Quality Research Division
U.S. Department of Agriculture
North Carolina State College
Raleigh, N.C. 27607
Telephone: 834–5211 Extension 475 (Area code: 919)

Horticultural Crops Branch
Market Quality Research Division
U.S. Department of Agriculture
Yakima and Mission Streets
Wenatchee, Wash. 98801
Telephone: 662–5903 (Area code: 509)

Stored-Product Insects Branch
Field Crops and Animal Products Branch
Market Quality Research Division
U.S. Department of Agriculture
209 West Oak Street
Watseka, Ill. 60970
Telephone: 432–2491 (Area code: 815)

Stored-Product Insects Branch
Market Quality Research Division
U.S. Department of Agriculture
Coastal Plain Experiment Station
Tifton, Ga. 31794
Telephone: 382–6530 (Area code: 912)

Stored-Product Insects Branch
Market Quality Research Division
U.S. Department of Agriculture
3401 Edwin Avenue
Savannah, Ga. 31403
Telephone: 234–0661 and 234–0662 (Area code: 912)

Stored-Product Insects Branch
Market Quality Research Division
U.S. Department of Agriculture
400 North Eighth Street
Richmond, Va. 23240
Telephone: 649–3611 Extension 2551 (Area code: 703)

Agricultural Research Service

The Agricultural Research Service conducts basic and applied research relating to the production and utilization of agricultural products. It is also responsible for control and regulatory programs involving enforcement of plant and animal quarantines, control and eradication of diseases and insect pests of animals and plants, and meat inspection. Within the Service, the main information resources are the Information Division and the libraries maintained by several research divisions.

Eastern Utilization Research and Development Division

Agricultural Research Service
600 East Mermaid Lane
Philadelphia, Pa. 19118
Telephone: 247–5800 (Area code: 215)

Northern Utilization Research and Development Division

Agricultural Research Service
1815 North University Street
Peoria, Ill. 61604
Telephone: 682–5481 (Area code: 309)

Southern Utilization Research and Development Division

1100 Robert E. Lee Boulevard
New Orleans, La. 70124
Telephone: 282–1441 (Area code: 504)

Western Utilization Research and Development Division

Agricultural Research Service
800 Buchanan Street
Albany, Calif. 94706
Telephone: 525–2244 (Area code: 415)

The Eastern Utilization Research and Development Division conducts research on animal fats, hides and leather, milk properties, meats, and plant products; the Northern Division is concerned with cereal properties and products, oilseed and industrial crops, and the development of fermentation processes; research on cotton-chemical reactions, finishes, physical properties, machinery and mechanical processes, food crops, naval stores, and oilseed crops is carried out by the Southern Division; and the Western Division conducts research on fruits and vegetables, field crops, poultry, wool and mohair, and the pharmacological properties of chemicals. Each division develops products and processes on a pilot-plant scale, and each maintains a reference library of books, journals, reports, and patents. Use of the collections is restricted to technically and professionally trained personnel. All four divisions answer technical questions, provide consulting services, and furnish interlibrary loans.

Information Division

Agricultural Research Service
East-West Highway and Bellcrest Road
Hyattsville, Md. 20782
Telephone: 388–8305 (Area code: 202)

Public information on agricultural research projects is available from this Division. Technical questions are answered by direct reply, by sending out publications, or by referral to specialists. There are no fees. Publications issued by the Agricultural Research Service include books, leaflets, pamphlets, division bulletins, and information bulletins. Some are free on request; others may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

National Animal Disease Laboratory

Animal Disease and Parasite Research Division
Agricultural Research Service
Post Office Box 70
Ames, Iowa 50011
Telephone: 232–0250 (Area code: 515)

The Laboratory is the Department of Agriculture's research center for the study of livestock diseases occurring in the United States. It grows and distributes "challenge" cultures of micro-organisms which are sent to vaccine manufacturers as a quality control measure in the preparation of veterinary biological products. It also maintains sample repositories for each batch or "serial" of vaccines or biological products, conducts check tests to spot contamination or other deterioration of quality, and establishes and promulgates production standards. Books, journals, and reports are collected on the veterinary sciences, biochemistry, microbiology, and toxicology. Foreign holdings include Russian, Italian, Spanish, French, and German materials.

Technical questions are answered, and reference and document services are available. The literature collection is available to technically and professionally trained personnel for direct use. Loans are usually made only through other established libraries. Research findings are published in the form of brochures, pamphlets, and bulletins.

Plum Island Animal Disease Laboratory

Animal Disease and Parasite Research Division
Agricultural Research Service
Post Office Box 848
Greenport, Long Island, N.Y. 11944
Telephone: 672–1500 (Area code: 914)

A research center for the study of contagious foreign animal diseases, the Laboratory is primarily concerned with preventing the entry of foreign animal diseases into the United States, controlling and eradicating any diseases that might gain entrance, and supplying scientific information to foreign countries. Data are collected on foot-and-mouth disease, rinderpest, Teschen disease, African swine fever, fowl plague, bovine pleuropneumonia, sheep pox, Nairobi sheep disease, African horsesickness, Rift Valley fever, Asiatic Newcastle disease, louping ill, East Coast fever, and Venezuelan equine encephalomyelitis. A reference library of books, journals, and reports is maintained by the Laboratory. Foreign material is collected in Russian, Italian, Spanish, French, and German.

The "Agent Safety Policy" of the Laboratory restricts the library to laboratory personnel; however, referrals are made to other libraries. Research results are published as pamphlets and bulletins.

Cooperative State Research Service

U.S. Department of Agriculture
14th and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–3079 (Area code: 202)

The Cooperative State Research Service coordinates agricultural research conducted by State Agricultural Experiment Stations with similar research in the U.S. Department of Agriculture. It assists station directors and workers in identifying major problem areas and provides professional review of scientific programs under way. It also assists State stations with the dissemination of research results and provides a central location for the abstracting and summarizing of projects. Areas of scientific interest include animal husbandry, physiology, pathology, and nutrition as related to the development of beef and dairy cattle, sheep, swine, and poultry; agronomy; plant pathology and physiology; horticulture; forestry; plant genetics; soil science; and closely allied fields, such as agricultural engineering, food technology, dairy technology, industrial uses, human nutrition, and home economics.

Consulting and document services are available. The Service has 36 nationally known authorities in various fields of agricultural research who will answer questions on their specialties. Technical questions are answered primarily for U.S. Government agencies in the Washington area. For general information and publications on a State, inquirers are requested to contact the respective State Agricultural Experiment Stations at the following locations: Auburn, Ala.; Palmer, Alaska; Tucson, Ariz.; Fayetteville, Ark.; Berkeley, Calif.; Davis, Calif.; Los Angeles, Calif.; Riverside, Calif.; Fort Collins, Colo.; New Haven, Conn., Storrs, Conn.; Newark, Del.; Gainesville, Fla.; Athens, Ga.; Experiment, Ga.; Tifton, Ga.; Honolulu, Hawaii; Moscow, Idaho; Urbana, Ill.; Lafayette, Ind.; Ames, Iowa; Manhattan, Kans.; Lexington, Ky.; Baton Rouge, La.; Orono, Maine; College Park, Md.; Amherst, Mass.; East Lansing, Mich.; St. Paul, Minn.; State College, Miss.; Columbia, Mo.; Bozeman, Mont.; Lincoln, Nebr.; Reno, Nev.; Durham, N.H.; New Brunswick, N.J.; University Park, N. Mex.; Geneva, N.Y.; Ithaca, N.Y.; Raleigh, N.C.; Fargo, N. Dak.; Columbus, Ohio; Wooster, Ohio; Stillwater, Okla.; Corvallis, Oreg.; University Park, Pa.; Rio Piedras, P.R.; Kingston, R.I.; Clemson, S.C.; Brookings, S. Dak.; Knoxville, Tenn.; College Station, Tex.; Logan, Utah; Burlington, Vt.; Blacksburg, Va.; Pullman, Wash.; Morgantown, W. Va.; Madison, Wis.; and Laramie, Wyo.

Economic Research Service

U.S. Department of Agriculture
14th and Independence Avenue SW.
Washington, D.C. 20250
Telephone 388–6933 (Area code: 202)

The primary function of the Service is to conduct research in the areas of agricultural economics and statistics, marketing analysis and development, analysis of foreign trade policy and world conditions, and developments affecting foreign markets for U.S. farm products. Field offices located throughout the United States, usually at State Agricultural Experiment Stations, carry out projects involving research in agricultural economics and rural sociology.

Consultations with research specialists are available by appointment. Information is also provided in periodical and nonperiodical reports. Periodic publications issued free on request include farm production economics reports; situation and outlook reports for various services and commodities; farm production, manpower, and level-of-living reports; reports on U.S. foreign trade in agricultural products; the *Checklist of Reports;* the *Agricultural Outlook Chartbook;* and *Consumer Purchases of Citrus and Other Juices.* Available for sale from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, are *Agricultural Economics Research,* a technical bulletin issued quarterly, and the *Farm Index,* issued monthly and providing a nontechnical presentation of research results.

Several hundred nonperiodical publications, covering results of research on all phases of the work of the agency are produced annually. Many of these are issued in cooperation with State Agricultural Experiment Stations.

Farmer Cooperative Service

U.S. Department of Agriculture
14th and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–5808 (Area code: 202)

The Farmer Cooperative Service conducts research and compiles information on the organization, management, and operations of farmer cooperatives engaged in marketing, purchasing, and farm business services. Studies are made of the cooperative marketing of cotton, oilseed, dairy products, grain, fruits and vegetables, livestock, wool, poultry and special crops; the cooperative purchasing of feed, seed, fertilizer, petroleum, and other farm supplies; and problems of farm business services, such as insurance, frozen food locker operation, and irrigation.

Consulting and document services are provided without charge in answer to specific inquiries. Publications issued relate principally to the economic phases of the operations of farmer cooperatives; they include *News for Farmer Cooperatives,* a monthly news journal. These publications are provided to farmer cooperatives, land-grant colleges, banks for cooperatives, and other Federal, State, and foreign agencies working with cooperatives. Others may purchase publications from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. Types of reports issued include *FCS Bulletins, Circulars, General Reports,* and *Special Reports.* A publications list is available on request.

Federal Extension Service

U.S. Department of Agriculture
14th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–6428 (Area code: 202)

Through county extension agents and specialists employed cooperatively with the State land-grant colleges and universities and the counties, the Service functions as the educational arm of the Department. These agents are users of research results in their program of helping local people meet farming, homemaking, marketing, youth, and community resource development problems. Specialists in the Federal Extension Service help the States in conducting pilot operations, program development, and teaching methods research, in addition to technical and program planning and operational help.

FES publications available at State Extension offices and agricultural libraries include a *Bibliography of Extension Research,* published every 5 years; *Review of Extension Research,* issued yearly; *Bibliography of Foreign Based Extension Research;* and the *Extension Service Review,* published monthly.

National Agricultural Library

U.S. Department of Agriculture
Room 1052, South Building
14th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–3434 (Division of Reference);
388–5304 (Division of Lending)
(Area code: 202)

National Agricultural Library, Law Branch

U.S. Department of Agriculture
Room 2016, South Building
14th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–7751 (Area code: 202)

National Agricultural Library, Bee Culture Branch

U.S. Department of Agriculture
Agricultural Research Center, Building A
Beltsville, Md. 20705
Telephone: 474–4800 Extension 291 (Area code: 301)

National Agricultural Library, Beltsville Branch

U.S. Department of Agriculture
Plant Industry Station
Beltsville, Md. 20705
Telephone: 474–6500 Extension 618 (Area code: 301)

The National Agricultural Library maintains a collection of over 1,212,000 volumes on agriculture and related sciences. In addition to books and bound journals, there are current periodicals, reports, films and photos, maps and charts dealing with botany, chemistry, animal industry, veterinary medicine, biology, agricultural engineering, rural sociology, forestry, entomology, law, food and nutrition, soil and fertilizers, and marketing, transportation, and other economic aspects of agricultural products. Literature is acquired in 50 languages from 200 countries. Foreign exchange of Department of Agriculture publications is arranged by NAL with approximately 5,000 institutions.

Special collections are available at the branch libraries. The Law Branch acquires materials on U.S. statute and case law as it relates to agriculture; it also prepares legislative histories. Information on beekeeping, bee diseases, plant pollination, insecticides, floral sources of honey, and other aspects of apiculture is collected at the Bee Culture Branch, which compiles and maintains the *Beekeeping Bibliography* in card form. At the Beltsville Branch, material is collected on animal husbandry, agricultural engineering, agricultural marketing research, plant science, home economics, entomology, soils, and biometrics.

The holdings of NAL and its branches are available for on-site reference and may be borrowed on interlibrary loan. Answers to reference questions and brief searches are provided free. Extensive literature searches are available to the general public for a fee; requests should be made through the Office of Technical Services, Department of Commerce, Washington, D.C., 20230. Photocopying is done at cost.

The Library prepares indexes and bibliographies, including the *Bibliography of Agriculture,* a monthly index of the world's literature in agriculture and related biological and chemical sciences. A limited number is available for free distribution to institutions and subscription requests may be directed to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Bibliographies and lists on specialized agricultural subjects are available for free limited distribution, or photocopies may be ordered from the library.

Office of Director of Science and Education

U.S. Department of Agriculture
14th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–3681 (Area code: 202)

This Office includes the Central Project Office, which is a primary source for information on the nature, location, and status of all research projects sponsored by the Department of Agriculture. Summary sheets and indexes by key subject and organization are kept. Information on current research projects is available to scientists and to research and development administrators. The Central Project Office also provides referral service, transferring technical inquiries to specialists throughout the Department of Agriculture research complex.

Office of Information

U.S. Department of Agriculture
14th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 737–4142 (Area code: 202)

The Office of Information disseminates general information on Department of Agriculture activities, administers the publications program of the Department, and produces and distributes motion pictures and other visual aids necessary to interpret Department programs and services. It also serves as a channel for all official USDA information and provides a special information service for Members of Congress. There is no charge for information services.

Many publications are available for free distribution, so long as the supply lasts. Generally no more than 1 copy of each of 10 publications is allowed for any one request. Educational institutions may obtain as many as 1 each of 100 free publications. Library and Office copies of free publications are provided to Federal, State, county, and local Government agencies when needed. Consideration will also be given to quantity requests if effective distribution can be assured. State and public libraries may also obtain one copy each of any free publication when needed. Priced USDA publications are sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Publications no longer in print may be consulted in public or university libraries maintaining Government publications; many of these libraries carry fairly complete files of Department of Agriculture publications. Microfilm and photoprint copies of any USDA publication may be purchased from the National Agricultural Library, U.S. Department of Agriculture, Washington, D.C., 20250.

Rural Electrification Administration

U.S. Department of Agriculture
12th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–5606 (Area code: 202)

A lending agency, the Administration collects data on rural electrification and rural telephone service reported by systems financed by REA loans. Limited consulting, reference, and document services are available. Inquiries on statistics, trends and developments in rural electric distribution, transmission and generation, and in rural telephony are answered directly or by sending a publication. Publications issued for borrower systems include standards and specifications, statistics, and policy and procedural bulletins in the fields of engineering, accounting, and management improvement. Press announcements on REA loans and other program developments are available to the general public without charge.

Soil Conservation Service

U.S. Department of Agriculture
12th and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–4543 (Area code: 202)

The Soil Conservation Service administers various Federal programs concerned with the national soil survey, watershed protection, flood prevention, and water disposal and utilization. It collects published climatic, geographic, and soil survey data for the documentation of studies of worldwide soil geography; conducts chemical, physical, and mineralogical studies of U.S. soils with reference to soil genesis and classification; and makes snow surveys and water supply forecasts. A collection of books, periodicals, journals, and data provides subject coverage in soils, plants and plant technology, engineering design, construction, hydrology, hydraulics, sedimentation, geology, drainage, irrigation, and farm and ranch planning as they relate to soil and water conservation. Foreign literature and data include material in French, German, Spanish, Russian, and other languages used in compiling data on world soil geography.

The information Division answers questions directly or refers inquirers to appropriate offices and laboratories of the Service for reply. The literature and data collections are accessible for direct use by approved visitors. Technical assistance is available at no cost to landowners and operators in soil conservation districts. Technical bulletins and handbooks are available free on request from SCS.

Soil survey reports and maps and an official monthly magazine, *Soil Conservation,* are sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Statistical Reporting Service

U.S. Department of Agriculture
14th Street and Independence Avenue SW.
Washington, D.C. 20250
Telephone: 388–5141 (Area code: 202)

The Statistical Reporting Service gathers and reports basic facts relating to agriculture and coordinates all work in the Department aimed at improving statistical methods.

SRS prepares estimates and reports on production, supply, price, and other aspects of the agricultural economy. Included are statistics on field crops, fruits and vegetables, livestock and dairy products, poultry, farm labor, cold storage holdings, naval stores, and prices received and paid by farmers.

Consulting, reference, and document services are provided. Published materials are freely available; certain unpublished materials are available to other Government agencies on a limited basis.

Two primary publications issued by the Service are *Agricultural Statistics* and *Agricultural Situation,* both of which are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Also issued at weekly, monthly, quarterly, and yearly intervals are crop, livestock, price, and cold storage reports, all containing current agricultural statistics. *Crop and Livestock Reports—Contents and Dates of Release* is available from the SRS Crop Reporting Board, U.S. Department of Agriculture, Washington, D.C., 20250.

U.S. DEPARTMENT OF COMMERCE

Coast and Geodetic Survey

Mail:
Coast and Geodetic Survey
U.S. Department of Commerce
Washington, D.C., 20230
Location:
Washington Science Center
Montrose Road and Old Georgetown Road, near Rockville, Md.
Telephone: 949–5310 (Area code: 301)

The primary function of the Coast and Geodetic Survey is to provide charts and related information for the safe navigation of marine and air commerce; geodetic control data for surveying engineering, cartographic, scientific, and defense purposes; and geophysical, astrophysical, and oceanographic data for charting, engineering, scientific, and defense purposes.

Through its district and regional offices, the Coast Survey controls its field operations and extends its services at the local level. Publications, motion pictures, maps and charts, and raw and compiled data are made available for loan, sale, or general distribution through these offices, located at the following addresses:

U.S. Coast and Geodetic Survey
Room 535
417 South Hill Street
Los Angeles, Calif. 90013
Telephone: 688–2838 (Area code: 213)

U.S. Coast and Geodetic Survey
Room 121 Customhouse
555 Battery Street
San Francisco, Calif. 94111
Telephone: 556–5551 (Area code: 415)

U.S. Coast and Geodetic Survey
Post Office Box 190
19th and Grant Streets
Tampa, Fla. 33601
Telephone: 248–2790 (Area code: 813)

U.S. Coast and Geodetic Survey
Room 224, Federal Building
Post Office Box 3887
Honolulu, Hawaii 96812
Telephone: 588698

U.S. Coast and Geodetic Survey
Room 314, U.S. Courthouse
Portland, Maine 04105
Telephone: 226–3361 Extension 1609 (Area code: 503)

U.S. Coast and Geodetic Survey
10th Floor, Customhouse
Boston, Mass. 02109
Telephone: 426–1481 (Area code: 617)

U.S. Coast and Geodetic Survey
Room 2603, Federal Building
911 Walnut Street
Kansas City, Mo. 64106
Telephone: 221–7000 Extension 2716 (Area code: 816)

U.S. Coast and Geodetic Survey
Room 221, University Plaza
100 North University Drive
Fort Worth, Tex. 76107
Telephone: 335–4211 Extension 782 (Area code: 817)

U.S. Coast and Geodetic Survey
102 Olney Road
Norfolk, Va. 23510
Telephone: 627–8472 (Area code: 703)

U.S. Coast and Geodetic Survey
Room 602, Federal Building
90 Church Street
New York, N.Y. 10007
Telephone: 732–9100 Extension 478 (Area code: 212)

U.S. Coast and Geodetic Survey
Room 705, Federal Building
Seattle, Wash. 98104
Telephone: 682–3300 (Area code: 206)

U.S. Coast and Geodetic Survey
Room 315 Customhouse
423 Canal Street
New Orleans, La. 70130
Telephone: 527–6552 (Area code: 504)

Administrative and Technical Services Division

Coast and Geodetic Survey
U.S. Department of Commerce
Washington, D.C. 20230
Telephone: 949–5310 Extension 331—Archives; Extension 193—Library; Extension 251—Geographic Branch (Area code: 301)

This Division is responsible for the dissemination of much of the technical and semitechnical output of the Coast and Geodetic Survey. Its Library Branch has holdings totaling some 130,000 volumes and subscribes to some 500 journals; publications dating back to the early 19th century are included. Subject emphasis is on geophysics, oceanography, cartography, and photogrammetry. Literature in all major languages, including the Slavic and Oriental, is represented. On-site reference use is limited to other Government agencies and graduate students. Interlibrary loans are restricted to items not available in large university or public libraries. The Library Branch also guides inquiries to appropriate specialists both within and outside the Coast and Geodetic Survey.

The Archives Section of the Division maintains an extensive collection in the areas of oceanography, cartography, tides and currents, geodesy, astronomy, and gravity, including both raw and compiled data. All documents and materials held by the section are available only on loan, not for retention. The collection is accessible for on-site use, but prior permission must be obtained through the Office of the Director of the Coast and Geodetic Survey.

The Geographic Branch provides the Coast Survey with necessary geographic research information as it applies to cartography. Holdings consist almost exclusively of maps and charts, some in microfilm. These items are disseminated according to established distribution lists and also in response to specific requests. Short lists of literature citations are provided in reply to inquiries, and assistance is furnished in the location of hard-to-find bibliographic material.

The Administrative and Technical Services Division also has a Visual Aids Section, which maintains a collection of panchromatic and still photographs and motion pictures illustrating the activities of the Coast and Geodetic Survey. The materials are available for loan, and on-site use is permitted.

Office of Cartography

Coast and Geodetic Survey
U.S. Department of Commerce
Washington, D.C. 20230
Telephone: 949-5310 (Area code: 301)

The primary function of the Office is to compile, publish, and reproduce the Coast and Geodetic Survey's nautical and aeronautical charts and tables, including charts required by private and commercial aviation. Among its holdings are nautical charts dating back to 1835, fathograms and hydrographic survey records, and raw data associated with the compilation of a large variety of aeronautical chart types. Technical questions are answered, including inquiries concerning lithographic and other processes and techniques employed in map production.

All maps and charts produced by the Office are available for sale; catalogs are provided on request.

Office of the Director

Coast and Geodetic Survey
U.S. Department of Commerce
Washington, D.C. 20230
Telephone: 949-5310 Extension 228—Scientific and Information Staff; Extension 304—Executive Assistant to the Director (Area code: 301)

The Office of the Director disseminates leaflets, brochures, and pamphlets pertaining to the general activities of the Coast and Geodetic Survey, and prepares for publication specialized information and data obtained by the technical and scientific offices of the Coast Survey. The Scientific and Technical Information Staff of the Office prepares and disseminates technical information generated by Coast Survey scientists, prepares scripts for and coordinates production of the Coast Survey's motion pictures, participates in interagency committees on science information, and maintains research files relating to the technical activities of the various units of the agency. It also provides a referral service for directing technical inquiries to the appropriate specialized divisions of the organization. General questions regarding the activities of the Coast and Geodetic Survey are answered by the Executive Assistant to the Director.

Office of Oceanography

Coast and Geodetic Survey
U.S. Department of Commerce
Washington, D.C. 20230
Telephone: 949-5310 Extension 122—Assistant Director; Extension 137—Operations Division; Extension 177—Marine Data Division; Extension 220—Tides and Currents Branch (Area code: 301)

This Office is responsible for carrying out the part assigned to the Coast and Geodetic Survey in the National Oceanographic Program. It will supply copies of field survey sheets and data for a fee covering recovery and reproduction costs.

The Operations Division of the Office of Oceanography is primarily concerned with the utilization of the 15 Coast Survey vessels to gather oceanographic, hydrographic, tidal, gravity, and magnetic data, including bottom cores and water samples. Technical questions are answered and short lists of literature citations provided in response to specific requests. The collection may be inspected on-site only; no loans are made.

The Oceanographic Analysis Branch of the Marine Data Division reduces and evaluates data obtained by Coast Survey ships occupying oceanographic stations, verifies hydrographic surveys, and analyzes marine magnetic, sea gravity, and marine subbottom reflection data. Holdings include bottom sediment samples, punched tapes of marine magnetic and gravity traces, a large quantity of raw and digested data, and several hundred verification maps and charts. Marine magnetic and sea gravity data, tide and current tables, bottom sediment samples, and short lists of literature citations are provided in response to specific requests.

The Marine Data Division's Marine Navigation Branch performs the field and editorial work required to publish the *United States Coast Pilot* series, which presents narrative descriptions of harbors and other coastal areas in the United States and its territories. The Branch provides consulting service without charge and assists other agencies in locating hard-to-find bibliographic materials. The eight-volume *Coast Pilot* series is available for purchase.

Six tide and current prediction tables are published each year by the Tides and Currents Branch of the

Marine Data Division. This branch processes original records obtained in the field for public use and for incorporation into prediction tables, analyzes bench mark data to retain features of tidal datum planes and mean sea level, and conducts special studies for the Coast Survey and other organizations. All tide and current records are available for on-site inspection without restrictions and may be obtained upon request at cost of reproduction.

Office of Physical Sciences

Coast and Geodetic Survey
U.S. Department of Commerce
Washington, D.C. 20230
Telephone: 949–5310 Extension 118—Assistant Director; Extension 111—Geodesy Division; Extension 113—Photogrammetry Division; Extension 158—Electronic Computing Division; Extension 236—Geomagnetism Division; Extension 197—Seismology Division (Area code: 301)

The Office is made up of five divisions: Geodesy, Geomagnetism, Seismology, Photogrammetry, and Electronic Computing.

The Geodesy Division performs a variety of highly specialized tasks related to the mathematical and physical determination of the earth's size and shape and location of points on its surface. It is responsible for the establishment and maintenance of a precise geodetic network covering the North American Continent. Brief answers are provided in response to technical inquiries; a fee is charged for extensive consultations.

The statutory responsibility of the Coast and Geodetic Survey as the Government agency responsible for the acquisition and reduction of earth-magnetism data is carried out by the Geomagnetism Division, which conducts field surveys and operates permanent magnetic observatories to determine and monitor changes in the earth's magnetic field. Data are exchanged with centers in the U.S.S.R., Denmark, and Japan. Holdings include almost 5 million punched cards showing hourly magnetic values; the cards are acquired at the rate of 350,000 annually. The collection is available for on-site use; data are furnished at cost of reproduction. Publications and charts are obtainable at a nominal cost. General information pertaining to geomagnetism is furnished to the extent permitted by facilities and personnel.

The Seismology Division studies earthquakes and associated phenomena and participates in an international seismograph network. A central repository for world earthquake data, the Division photographs seismograms for storage and dissemination. The collection is available for on-site use, and photocopies are provided for a fee. Seismograph equipment is sometimes tested by the Division for outside agencies.

The Coast Survey's programs in aerial photography, photogrammetric surveys of coastal regions, and laboratory processing of aerial photographs are carried out in the Photogrammetry Division. Holdings include aerial photographs, manuscript coastline maps, airport obstruction charts, turbine data sheets for various airports in the United States, and documented positions of electronic air-navigation aids. These materials are available at cost of reproduction. The Division provides answers to technical inquiries and advisory services in the areas of aerial photography, the processing and printing of aerial photographs, photogrammetric instruments and procedures, and instruments and procedures for field surveys. Occasional technical bulletins published by the Division may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

The data processing requirements of the Coast and Geodetic Survey are met by the Electronic Computing Division. Its work covers problems in scientific research; the reduction of geodetic, photogrammetric, cartographic, oceanographic, seismic, and geomagnetic data; fiscal and administrative data processing; and special reports and training material. Questions pertaining to these areas are answered, and short lists of literature citations provided in response to specific requests.

Office of Research and Development

Coast and Geodetic Survey
U.S. Department of Commerce
Washington, D.C. 20230
Telephone: 949–5310 Extension 164 (Area code: 202)

This Office implements the Coast and Geodetic Survey's requirements in basic and applied research and, consequently, pursues appropriate investigations in each of the disciplines and technologies in which the Coast Survey is primarily interested. The research grants made by this Office to universities and private industry provide a growing collection of new information in the form of technical reports, research, studies, scientific papers, and similar materials. The Coast Survey's Science Information, Communication, and Exchange Program is conducted by the Scientific and Technical Information Staff in close cooperation with this Office; this program is the Coast Survey's principal informational effort directed toward promoting the dissemination of research results from the agency's geophysical disciplines and related technologies.

The Office of Research and Development answers brief questions and, on occasion, has answered detailed technical queries.

Maritime Administration

Office of Ship Construction

General Accounting Building
441 G Street NW.
Washington, D.C. 20235
Telephone: 386-4973 (Area code: 202)

An organization specializing in specifications of ships for Government use, the Office of Ship Construction maintains a collection on naval architecture and marine engineering consisting of data, models, films, photographs, slides, ship plans in microform, project records, technical reports, and standards and specifications. Material from sources in French, German, Russian, and Spanish is included.

The Office answers brief questions, provides detailed answers to technical inquiries and prepares analyses and evaluations in connection with requests from contracting shipbuilders and associated naval architectural firms on the basis of need-to-know. Requests for copies of available standards and specifications are met from available stock or reproduced at the expense of the requester, who is expected to utilize the information in the common interest of the development of the U.S. Merchant Marine.

Public Information Office

U.S. Maritime Administration
Room 3037, GAO Building
441 G Street NW.
Washington, D.C. 20235
Telephone: 386-4461 (Area code: 202)

The Public Information Office disseminates information on research projects undertaken by or for the Maritime Administration in the form of reports and press releases. A limited number of photographs, slides, and motion picture films are available, limited for the most part to the nuclear-powered ship, the NS *Savannah,* the hydrofoil ship *Denison,* and the surface-effect ship.

Requests to be placed on the mailing list for all press releases will be honored. On-site use of all material is permitted. Brief answers to questions are given or referrals made to other agencies or individuals. A limited number of free photographs will be supplied on request for use in publications. Films and slides may be borrowed, but the number is very limited. Most research publications are available only through purchase, but single copies are free to the press if available.

National Bureau of Standards

The National Bureau of Standards serves as the focal point in the Federal Government for assuring maximum application of the physical and engineering sciences to the advancement of technology in industry and commerce. To accomplish this objective, the Bureau is organized into four institutes covering broad program areas of research and services.

The Institute for Basic Standards provides the central basis within the United States for a complete and consistent system of physical measurement, coordinates that system with the measurement systems of other nations, and furnishes essential services leading to accurate and uniform physical measurements throughout the Nation's scientific, industrial, and commercial communities. An additional important responsibility of the Institute is the operation of the Office of Standard Reference Data, which coordinates the National Standard Reference Data Program and provides a central national field of critically evaluated data in the physical sciences.

The Institute for Materials Research produces and distributes a wide variety of carefully characterized reference materials to meet the needs of science and industry. In addition, it assists and stimulates industry through research to improve understanding of the basic properties of materials and contributes to the National Standard Reference Data Program by developing data on the bulk properties of materials and devising measurement techniques for determining these properties.

The Institute for Applied Technology develops criteria for the evaluation of the performance of technological products and services and provides specialized information services to meet the needs of the industrial community. It also conducts systems studies aimed at understanding and facilitating technological innovation. The Institute provides broadly based technological services, including development of criteria for performance standards and tests for measuring performance based on such criteria.

The Central Radio Propagation Laboratory, located at Boulder, Colo., conducts research and provides related services on basic radio propagation phenomena. It is the central agency within the Federal Government for the collection, analysis, and dissemination of information on the propagation of radio waves at all frequencies along the surface of the earth, in the atmosphere, and in outer space.

The *Journal of Research of the National Bureau of Standards* is the Bureau's principal medium for making its research and development known to the scientific community. It is published in the following four sections: *Physics and Chemistry,* issued six times a year; *Mathematics and Mathematical Physics,* issued quarterly; *Engineering and Instrumentation,* also issued quarterly; and *Radio Science,* issued monthly. Each section is available separately on yearly subscription from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. *Technical News Bulletin,* an illustrated monthly periodical presenting brief articles on current research activities of the Bureau, is also available on a yearly subscription basis from the Superintendent of Documents. Nonperiodicals include mathematical tables, manuals, and studies, monographs, handbooks, providing recommended codes of engineering and industrial practices, and technical notes. These publications are for sale by the Superintendent of Documents.

The best way to keep abreast of NBS activities is through the monthly *Technical News Bulletin,* available on subscription, and the NBS *Research Highlights,* issued annually. Specific technical inquiries should be sent to the proper NBS division or office listed below; general inquiries or telephone calls should be directed to the NBS Office of Technical Information at Connecticut Avenue and Van Ness Street, NW., Washington, D.C., 20234 (362–4040 extension 7812) or South Broadway, Boulder, Colo., 80301 (442–2161 extension 245).

Analytical Chemistry Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Division conducts research in a number of areas of analytical chemistry, including characterization by radiochemical, spectrochemical and electrochemical analysis, quantitative separations, and purification of materials. At the same time, it prepares and characterizes standard reference materials in these areas as listed in NBS Miscellaneous Publication 241, *Standard Materials Issued by the National Bureau of Standards,* for testing and analysis purposes. It also maintains a collection of reports and information on activation analysis, high purity materials, optical emission analysis, and trace analysis.

Technical inquiries are answered. Consulting services are provided free or on contract to other Government agencies and to the public.

Applied Mathematics Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

Research is conducted by the Division in fields of mathematics important to the physical and engineering sciences, with special emphasis on statistical and numerical analysis and mathematical physics and on operations research. The Division also develops mathematical tables and other working tools. A reference collection of mathematical tables of elementary and special functions is maintained. It is accessible for on-site reference use, and interlibrary loan service is available to Government agencies.

Computation and consultation services in applied mathematics are available without charge or under contract.

Atomic Energy Levels Information Center

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Center's principal publication is NBS Circular 467, *Atomic Energy Levels, as Derived from the Analysis of Optical Spectra,* issued in three volumes and available for purchase from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. The three volumes provide spectroscopic data for all elements, except rare earths, that concern atomic energy levels, electron configurations, quantum numbers, magnetic spliting factors, and ionization potentials. A companion publication, also available for purchase from the Superintendent of Documents, is NBS Circular 488, *An Ultraviolet Multiplet Table.*

Atomic Transition Probabilities Data Center

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

An information source on atomic transition probabilities and cross sections, the Center evaluates data compiled from scientific publications and disseminates it to researchers in the areas of plasma physics and astrophysics. Data are collected on numerical values for specific transitions. Foreign literature includes material in Russian, French, German, and Dutch.

A Bibliography on Atomic Transition Probabilities, NBS Monograph 50, 1962, may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. An *Addendum* to the bibliography is available upon request to the Data

Center. At present, the first 10 elements are being evaluated, and "best" values of transition probabilities will be published in late 1964 or early 1965.

Literature searches are made and data supplied from the Center's files without charge. Bibliographies are available on request.

Boulder Laboratories Library

National Bureau of Standards
325 South Broadway, Room 1202
Boulder, Colo. 80301

Supporting the research programs of the Boulder Laboratories, the Library maintains a collection of books, periodicals, reports, and foreign translations in the fields of ionosphere research and propagation, upper atmosphere and space physics, radio propagation engineering, radio standards, cryogenic engineering, and related subjects. Holdings also include a standard reference collection of books on physics, mathematics, electrical engineering, and chemistry.

Reference and document services are available only to the NBS staff, but holdings are available to others for on-site use, and interlibrary loans are made.

Building Research Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Division conducts research in chemistry, engineering, and physics to obtain data on properties and performance of building materials, structures, and equipment; develops methods for testing materials, mechanisms, and structures; performs fundamental fire research; and develops building codes and safety standards. Areas of interest cover all aspects of building technology, including structural engineering, fire protection, air conditioning, heating and refrigeration, floor, roof, and wall coverings, codes and safety standards, heat transfer, and concreting materials.

Technical inquiries are answered on a courtesy basis; advisory and consultation services are available without charge or under constract to Government agencies, the scientific community, and industry.

Cryogenic Data Center

National Bureau of Standards
325 South Broadway
Boulder, Colo. 80301

A clearinghouse for research and development literature on cryogenics, the Data Center compiles tables and charts of thermophysical property data based on selected values from the literature for wide ranges of temperature and pressure and codes documents from the world literature on cryogenics on magnetic tape for automated preparation of bibliographies. The Center also prepares magnetic tapes of thermodynamic properties of gases and issues selected entropy Mollier diagrams of cryogenic fluids as well as technical information sheets, including graphs on thermal conductivity and data on thermal expansion.

Information services are extended to NBS scientific personnel and to the cryogenic industry. Technical inquiries and problems are answered by the Data Center staff; consulting services are also available.

Electricity Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Division establishes the units and standards for measurement of electrical quantities, such as resistance, capacitance, inductance, current, voltage, power and energy up to 30 Kc/s (kHz). It also performs basic research in the areas of dieletrics, magnetism, and electrochemistry.

Consulting services are available to Government agencies. The Division calibrates precision electrical standards (measuring apparatus) for industry and Government laboratories for a fee.

Electron Devices Data Service

National Bureau of Standards
Connecticut Avenue at Van Ness Street NW.
Washington, D.C. 20234

Information made available by the Service to the scientific community covers the electrical and technical characteristics of electron devices with particular emphasis on receiving tubes, microwave tubes, and semiconductor devices. Sources used in searching and compiling data consist chiefly of manufacturers' specifications and catalogs, but they also include current electronics literature. Although the Service confines its searches mainly to devices manufactured in the United States, it has also compiled data on devices made throughout the world, including several hundred Russian devices through direct contact with the manufacturers and by screening Russian journals.

Information services are available to anyone without charge, unless long and extensive evaluations are required. Inquiries may be made by letter or telephone, but in either case they should contain as much factual material as possible and should include background information when appropriate.

Publications of the Service available for purchase from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, are NBS Handbook 83, *Tabulation of Data on Receiving Tubes;* NBS 70, *Tabulation of Data on Microwave Tubes;* and Technical Note 186, *Tabulation of Published Data on Soviet Electron Devices.*

Heat Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Heat Division establishes units and standards for thermometry from the lowest to the highest accessible temperatures and for heat measurements, such as thermal diffusivity, heat capacity, and heat of combustion. Basic research is performed in low temperature physics, high temperature physics, and molecular spectroscopy. The Division also develops methods and techniques for calibration of devices to measure temperature and heat.

Consultation services concerning heat problems are provided free or on contract to other Government agencies and to the public. Specifications and standards are issued.

Information Technology Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The function of the Division is to provide staff and facilities for research and development, consultation, and technical collaboration directed at the effective utilization of automatic information processing techniques and equipment in Government. The basic purpose is to maintain an integrated collection of skills and research tools for conducting research, development, and design of systems leading toward the introduction of effective automated techniques in Governmental activities. Implementation of these objectives includes systems analysis and design, research evaluation and development of improved circuitry, the design of novel logical organization of processing and control systems, the development of automatic systems for the collection, transmission, and presentation of experimental data, and the creation of techniques for machine processing of syntactic and graphic forms of data.

Technical inquiries are answered without charge; consultation and development work is performed for Government agencies under contract.

Inorganic Materials Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The responsibility of the Inorganic Materials Division is to determine and compile precise data on the constants, properties, constitution, and microstructure of nonmetallic inorganic substances, including ceramics, glass, and refractories. The Division develops techniques for the preparation of these substances in very pure form and for measurement of their properties under carefully controlled conditions, extending the measurements to the extremes of high and low temperatures, high pressures, and great purity. It also maintains a collection of phase diagrams of nonmetallic, inorganic anhydrous substances, compiled from journals, reports, and patents. Foreign literature and data include scientific papers in Russian, English, German, French, and Italian.

Technical questions are answered without charge. Consulting services are available to Government agencies on contract or without charge.

Phase Diagrams for Ceramists, prepared by the Division, is available for purchase from the American Ceramic Society.

Instrumentation Information Center

National Buearu of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

Information on measuring instruments, controls, and data handling devices is compiled and disseminated by the Center. Subject coverage is instrumentation, broadly defined as the art, science, and technology relating to devices that extend the perceptual, manipulative, intellectual, and communicative capabilities of man. Data are stored and retrieved by means of an optical coincidence system developed by NBS. The Center also conducts experiments to improve methods of information storage and retrieval.

Information and advice on instrumentation is provided to the public without charge, within limits imposed by priority demands. Consultations and literature searches are provided to the NBS staff and to other Government agencies and their contractors on a contract or no-cost basis. The reference file is open for search purposes.

The Center prepares state-of-the-art reviews, technical reports, and bibliographies.

Ionosphere Research and Propagation Division

National Bureau of Standards
South Broadway
Boulder, Colo. 80301

A central repository for data, reports, and information in the field of ionospheric radio wave propagation, the Division conducts basic research on the propagation of radio waves as affected by the ionosphere and on the nature of the media through which radio waves are transmitted. It also prepares predictions of radio wave propagation and makes forecasts of geomagnetic activity.

A warning service of disturbances to radio signals is provided, and a consulting service is available to Government, industrial, and scientific agencies on a contract or no-cost basis.

CRPL Ionospheric Predictions, a monthly bulletin available on yearly subscription, provides information necessary for calculating the best frequencies for radio communication between any two points in the world at any time during a given month. Each issue is released 3 months in advance. *Revision Factors for CRPL Ionospheric Predictions,* a supplement to the above bulletin, is issued semimonthly.

Mechanics Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Division establishes standards for sound pressure and intensity, shock, vibration, force, strain, pressure, vacuum, viscosity, and rate of gas and liquid flow. It determines constants, such as the value of gravity, and investigates the properties of materials and structural elements. Basic research regarding the rheological properties of materials is also performed, including the development of absolute methods for the measurement of rheological quantities.

Consulting and advisory services are provided free or on contract. Calibration services are available in accordance with an established schedule of fees.

Hydraulic Research in the United States, issued annually by the Division, is available for purchase from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402.

Metallurgy Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

Research on the structure and properties of metals conducted by the Division includes theoretical and experimental investigations of fatigue and fracture, creep, electrodeposited coatings, stress corrosion, phase transformations and mechanical properties of ferrous alloys, crystal growth, alloy physics, diffusion, reactions at metal surfaces, and imperfections in metal crystals.

Technical inquiries are answered on a courtesy basis; advisory and consultation services are available without charge or under contract to Government agencies, the scientific community, and industry.

Metrology Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Metrology Division establishes units and standards of length, mass, volume, color, and light, including ultraviolet and infrared. It determines fundamental properties of materials, such as refractive index and thermal expansion; makes calibrations and measurements of photographic apparatus, including characteristics of photographic films, optical materials, length standards, gages, and reference weights. In the Division, new types of optical and photometric apparatus are developed for military purposes and research is conducted on laser measurement.

Technical inquiries from the public are answered free. The Division provides a consulting service to Government, commercial, and scientific agencies on a contract or no-cost basis.

NBS Library

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

As a supporting service to the research programs of the Bureau, the Library maintains a well-rounded collection of reference books, texts, monographs, journals, reports, and translations in all areas concerned with standards of physical measurement. Subject coverage includes physics; chemistry; mathematics; techniques of physical measurement; engineering, including civil, mechanical, electrical, chemical, aeronautical, and automotive; radio; electronics; metallurgy; thermodynamics; meteorology; and industrial technology, such as leather, paper, petroleum, rubber, and textiles. There is a special collection of AEC reports. Twenty-eight foreign languages are represented in the collection. Copies of translations prepared by members of the scientific staff and custom translations made for the Bureau are deposited in the libraries at Washington and Boulder, and in the Office of Technical Services, Department of Commerce, Washington, D.C., 20234. OTS lists these translations in its Bulletin, *Technical Translations.*

The Library is open to the public for on-site research, technical questions are answered, and its holdings are made available to others through interlibrary loan.

Office of Standard Reference Data

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The mission of the Office is to administer, on a national basis, the program of the National Standard Reference Data System (NSRDS). The NSRDS is the Government-wide complex of activities, concerned with the compilation and critical evaluation of quantitative information on the physical and chemical properties of substances. One of the activities of the Office of Standard Reference Data is the operation of a Data Center which will contain a complete collection of critically evaluated data and will offer various services to the technical community based on its storehouse of information.

Office of Standard Reference Materials

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

This Office provides a national focal point for standard reference materials activities, including all types of well-characterized materials that can be used to calibrate a measurement system or to produce scientific reference data. The office serves as a clearinghouse for such requirements, which are becoming increasingly more complex, and stands ready to consider well-documented requests for the development of new types of standard reference materials. Present materials available are listed in NBS Miscellaneous Publication 241, *Standard Materials Issued by the National Bureau of Standards.*

Office of Technical Services

National Bureau of Standards
Washington, D.C. 20234

Office of Technical Information
Boulder Laboratories
National Bureau of Standards
South Broadway
Boulder, Colo. 80301

OTS operates the Clearinghouse for Federal Scientific and Technical Information, which provides a central point of contact in the Government for the availability of unclassified technical reports, a unified Government-wide index to the unclassified technical report literature, referral to sources of technical expertise associated with Government-sponsored research and development, and information about Government-sponsored technical work in progress.

The Clearinghouse collection consists primarily of reports of the Army, the Navy, the Air Force, the Atomic Energy Commission, and the National Aeronautics and Space Administration; however, it also includes reports of such agencies as the Federal Aviation Agency, the Department of the Interior, and the Department of Health, Education, and Welfare. When OTS receives a request for a report not in its collection, it attempts to obtain the report from the originating agency.

Documents are made available to the public in either full-size reproduction or in microfiche. Prices of documents are based on OTS costs of reproduction and handling.

OTS conducts a foreign technical information program to collect, catalog, and publish abstracts and complete translations of Russian and other foreign technical publications prepared by other Government agencies., Translations prepared by industry, universities, and other non-Government organizations are collected by the Special Libraries Association Translations Center at the John Crerar Library in Chicago, Ill. All translations received by OTS or the John Crerar Library are announced in *Technical Translations,* an OTS guide to translated material available to American science and industry.

General reference services for the identification and location of OTS reports and translations are provided free of charge. A technical literature searching service performed in cooperation with the Science and Technical Division of the Library of Congress is provided on a fee basis. On-site use of the subject catalogs at the OTS Library is permitted.

Periodic publications available on a yearly subscription from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, include the following: *U.S. Government Research Reports,* a monthly bibliographic and abstract journal; *Technical Translations,* an abstract journal issued twice a month; and *Technical Reports Newsletter,* a monthly review providing a detailed analysis of selected research reports. Selective bibliographies, compiled in special areas of interest, such as plastics, welding ,and transistors, are sold individually. OTS issues price lists of AEC reports without charge.

Collections of OTS publications as well as those of the National Aeronautics and Space Administration are maintained at Federal Regional Technical Reports Centers. These depositories, providing reference, interlibrary loan, and reproduction services, are located at the following universities and libraries:

University of California
General Library
Berkeley, Calif. 94704

University of California
University Library
Los Angeles, Calif. 90024

Library of Congress
Science and Technology Division
Washington, D.C. 20540

Georgia Institute of Technology
Price Gilbert Library
Atlanta, Ga. 30300

The John Crerar Library
35 West 33rd Street
Chicago, Ill. 60616

Massachusetts Institute of Technology
M.I.T. Libraries
Cambridge, Mass. 02139

Linda Hall Library
5109 Cherry Street
Kansas City, Mo. 64100

Columbia University
Engineering Library
Seeley W. Mudd Building
New York, N.Y. 10027

Carnegie Library of Pittsburgh
400 Forbes Street
Pittsburgh, Pa. 15213

Southern Methodist University
Science Library
Post Office Box 1339
Dallas, Tex. 75222

University of Colorado
Boulder, Colo. 80301

University of Washington Library
Government Documents Center
Seattle, Wash. 98105

Office of Weights and Measures Library

National Bureau of Standards
Gaithersburg, Md. 20706

An archival and reference center in the field of weights and measures, the Library collects books and historical documents on standards, laws and administration, and units and systems. The emphasis is on the history of weights and measures administration. Collections are open to Bureau staff members, students, and researchers.

The annual *Report of the National Conference on Weights and Measures,* a conference sponsored by the National Bureau of Standards to promote uniformity in weights and measures administration in the United States is available on request.

Polymers Division

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

One of the major functions of the Division is to conduct fundamental research and to determine and compile precise data on the constants, properties, constitution, and structure of both natural and synthetic polymers. Many of the useful properties of polymeric materials, such as rubber, textiles, paper, leather, and plastics, depend on the molecular size, shape, distribution, and flexibility of the polymer chains. New methods are developed for the preparation of synthetic polymers of pure and known structures to establish a correlation between the chemical and physical structure and the properties.

Physical and chemical testing is conducted on polymeric materials for Federal and State agencies. Cooperation is exercised with other Government agencies in evaluating the performance characteristics of polymeric products of vital importance to their programs. Standard samples are developed and maintained for calibrating test procedures for polymeric materials. Cooperation in measurement and standardization activities is maintained with industry, technical societies, Government agencies, and national and international standardization bodies. New and improved techniques are also developed for the measurement of physical and chemical properties of dental materials, and investigations are made on the structure of human tooth enamel and dentin.

Radio Standards Laboratory

National Bureau of Standards
South Broadway
Boulder, Colo. 80301

The Laboratory measures physical quantities and material properties pertaining to radio science, establishes national standards, and calibrates electronic instruments. Its research interests include frequency and time disseminations, radio and microwave materials, atomic frequency and time-interval standards, radio plasma, microwave physics, high-frequency electrical and impedance standards, microwave calibration, low-frequency calibration, and microwave circuit standards.

Consulting and advisory services are provided free or on a contract basis to other Government agencies, the scientific community, and industry.

Radio Systems Division

National Bureau of Standards
South Broadway
Boulder, Colo. 80301

The research program of the Division relates to long-distance radio transmission for communication, navigation, time synchronization, detection, and positioning, and includes electromagnetic wave propagation studies for ionospheric groundwave and line-of-sight paths to define the utility, limitations, and disturbances of the transmission channel. The Division also studies antenna principles, communication theory, and modulation and navigation techniques to improve the reliability and efficiency of radio spectrum utilization. Standards and methods of measurement in radio systems are devised.

Consulting and advisory services, particularly concerning system performance factors, are available to Government, commercial, and scientific institutions without charge or on a contract basis. Technical reports are prepared.

Research Information Center and Advisory Service on Information Processing

National Bureau of Standards
Connecticut Avenue and Van Ness Street NW.
Washington, D.C. 20234

The Center collects and maintains information on research and development in the field of information processing, with emphasis on machine processing of natural language and graphic data, related areas of research in man-machine relationships, information storage, selection and retrieval systems, operations research, and mechanized translation. Holdings consist primarily of reports and industrial literature. Foreign literature is collected in French, German, and Russian.

Consulting and advisory services are available to persons having a bona fide interest in information processing. Such visitors may have access to bibliographic reference data and may review unclassified items in the collection.

Research information is disseminated in state-of-the-art reviews, bibliographies, and reports.

Troposphere and Space Telecommunications Division

National Bureau of Standards
South Broadway
Boulder, Colo. 80301

The concern of the Troposphere and Space Telecommunications Division is the most efficient use of the radiofrequency spectrum. Projects cover the development of techniques for measuring basic characteristics of radio propagation and studies of the lower atmosphere, particularly those characteristics which affect propagations through the troposphere. The Division also measures radio noise in a worldwide network of stations at all frequencies throughout the radio spectrum. Subject interests include data reduction instrumentation, radio noise, tropospheric measurements, tropospheric analysis, progagation-terrain effects, radiometeorology, and lower atmosphere physics.

The Division provides advisory services regarding frequency allocations to Government, commercial, and scientific agencies on a contract or no-cost basis.

Upper Atmosphere and Space Physics Division

National Bureau of Standards
South Broadway
Boulder, Colo. 80301

Basic and applied research is performed by the Division on the physical and dynamic properties of the earth's upper atmosphere and the interplanetary medium. The program includes investigations of interactions of electromagnetic and corpuscular radiation with both media and the influence of the sun upon these media, comparative studies of the earth's atmosphere and the atmospheres of other planets, and laboratory investigations of ionized gases and atmospheric constituents. Subject areas of interest cover upper atmosphere and plasma physics, ionosphere and exosphere scatter, airglow and aurora, and ionosphere radioastronomy. The Division provides a consulting service to Government agencies, industry, and scientific institutions on contract or without charge. Technical reports are issued.

Patent Office

14th and E Streets NW.
Washington, D.C. 20231
Telephone: 967–4058 (Area code: 202)

The chief function of the Patent Office is to administer the patent and trademark laws as they relate to the granting of patents for inventions and the registration of trademarks. It examines applications for patents to ascertain whether the applicants are entitled to patents under the law and grants the patents when they are so entitled; it examines the applications for trademarks and passes upon their registrability; it records assignments of patents, maintains a Search Room for the use of the public to examine issued patents, and supplies copies of records and information concerning patents and trademarks; and it makes known the technology contained in patents as they are issued.

The Patent Office has no jurisdiction over questions of infringement and the enforcement of patents, nor over matters relating to the utilization of patents of inventions. It does not give advice concerning the propriety of filing an application, nor does it respond to inquiries as to whether an alleged invention has been patented. The Office does not act as an expounder of the patent law or as a counselor for individuals.

Publications issued by and obtainable from the Patent Office include the following:

Patents. The specification and accompanying drawings of all patents are published on the day they are granted, and printed copies are sold to the public by the Patent Office; printed copies of any patent identified by its patent number may be purchased. Future patents classified in subclasses containing subject matter of interest may be obtained as they are issued by prepayment of a deposit and a service charge. Requests for information about this subscription service should be addressed to the Commissioner of Patents.

Trademarks. Copies of trademark registrations are printed and sold. Trademarks must be identified by registration number or name of registrant and approximate date of issue.

Classification Bulletin of the United States Patent Office. The various changes and advances in classification made from time to time are collected and published in bulletins which report these changes and the definitions of new and revised classes and subclasses.

General Information Concerning Patents. Designed for the layman, this pamphlet contains a large amount of general information concerning the granting of patents expressed in nontechnical language. Single copies are distributed free on request.

General Information Concerning Trademarks. This pamphlet serves the same purpose with reference to trademarks that the preceding one does concerning patents. Single copies are distributed free on request.

Questions and Answers About Trademarks; Answers to Questions Frequently Asked About Patents; and *General Information Concerning Plant Patents.* Single copies of these three pamphlets are available free on request.

Among publications which may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, are the following:

Official Gazette of the United States Patent Office. This is the weekly official journal relating to patents and trademarks. Published on the same day as the weekly issue of patents, it contains a claim and a selected figure of the drawings of each patent granted on that day; a list of trademarks registered; decisions in patent and trademark cases rendered by the courts and the Patent Office; notices of patent and trademark suits, indexes of patents and patentees; lists of patents available for license or sale; and general information such as orders, notices, changes in rules, and changes in classification. Illustrations of and claims for the patents are arranged according to the Patent Office classification of subject matter. The *Official Gazette* is sold by annual subscription and in single copies. Decisions which have been published weekly in the *Official Gazette* are republished in an annual volume titled *Decisions of the Commissioner of Patents.*

Index of Patents Issued From the United States Patent Office. This annual index to the *Official Gazette* contains an alphabetical index to the names of patentees and a list identifying the subject matter of the patents granted during the calendar year.

Manual of Classification of Patents. This is a looseleaf book containing a list of all the classes and subclasses of inventions in the Patent Office classification of patents, a subject matter index, and other information relating to classification. Substitute pages are printed from time to time.

Patent Laws. This is a compilation of laws in force; revised editions are published from time to time.

Rules of Practice of the United States Patent Office in Patent Cases. This publication contains the rules governing the procedures in the Patent Office which have been adopted by the Commissioner under the authority of the patent statutes and approved by the Secretary of Commerce. Supplementary material, such as forms and relevant sections of the patent law, is included.

Trademark Rules of Practice of the United States Patent Office. Rules governing the procedure in the Patent Office in trademark cases are contained in this publication, which also contains trademark laws in force.

Patents and Inventions, an Information Aid for Inventors. The purpose of this pamphlet is to help inventors to decide whether to apply for patents, to obtain patent protection, and to promote their inventions.

Roster of Attorneys and Agents Registered to Practice Before the U.S. Patent Office. This list of registered attorneys and agents is arranged alphabetically and also geographically by States and cities.

Patent Attorneys and Agents Available to Represent Inventors Before the U.S. Patent Office. This pamphlet lists those patent attorneys and agents registered to prepare and prosecute patent applications before the Patent Office who are available to represent individual inventors and companies.

Manual of Patent Examining Procedure. Written for examiners in the Patent Office, this manual provides detailed descriptions of the procedures followed by the examiners.

Guide for Patent Draftsmen. The requirements for Patent Office drawings are given in the guide. Illustrations are included.

How to Obtain Information from United States Patents. This publication provides how-to-do-it information on making novelty or state-of-the-art studies and explains how U.S. patents may be used as a basic research tool.

Office of Information Services

U.S. Patent Office
14th and E Streets NW.
Washington, D.C. 20231
Telephone: 967–4058 (Area code: 202)

Information policies governing all activities of the Patent Office are formulated, coordinated, and administered by the Office of Information Services, which serves as a contact point for persons seeking details about facilities for research offered by the Patent Office and how to utilize them most effectively. Answers are provided to general, nontechnical questions without charge, and referrals are made when appropriate. Written inquiries should be addressed to the Commissioner of Patents.

Publications lists and informational material, such as pamphlets, press releases, clippings, and booklets are available for distribution and for on-site use.

Office of Research and Development

U.S. Patent Office
1406 G Street NW.
Washington, D.C. 20231
Telephone: 967–5295 (Area code: 202)

The Office directs and coordinates a research program concerned with developing mechanized information retrieval systems to assist Patent Examiners in conducting novelty searches of the prior art. *Patent Office Research and Development Reports,* which describe the various aspects of the research program, are prepared periodically and may be purchased from the Sales and Distribution Section, Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234.

Scientific Library

U.S. Patent Office
14th and E Streets NW.
Washington, D.C. 20231
Telephone: 967–2500 (Area code: 202)

The Library's collection includes scientific and technical books, scientific periodicals, documents, advertising circulars, microfilms, catalogs, and other literature, both foreign and domestic, covering every art and science within the scope of the patent system, all arranged in classified order. The collection of foreign patent specifications and patent and trademark journals is almost complete for those countries of the world which issue patents in printed form.

Public access to the collection is permitted during regular office hours. Advisory service regarding the use of materials is furnished. Interlibrary loans of books and periodicals are available to other libraries in the District of Columbia area.

Search Room and Record Room

U.S. Patent Office
14th and E Streets, NW.
Washington, D.C. 20231
Telephone: 967–2580 (Search Room), 967–2492 (Record Room) (Area code: 202)

A Search Room is maintained for the benefit of the public in searching and examining U.S. patents. It contains patents granted since 1836, arranged according to the Patent Office classification; a bound set of U.S. patents arranged in numerical order; and a complete set of the *Official Gazette.* Adjoining the Search Room is a Record Room in which the public may inspect the records and files of issued patents and such other records as may be open to public inspection.

Applicants and their attorneys or agents may examine their own cases in the Record Room; public records may be examined in the Record Room, Search Room, or Library, as the case may be.

Weather Bureau

2400 M Street NW.
Washington, D.C. 20235
Telephone: 966-2400 (Area code: 202)

The primary mission of the U.S. Weather Bureau is to report the weather and climate of the United States and its possessions, and to issue storm warnings and forecasts of weather conditions affecting the national safety and economic welfare. In addition to observing, recording, and reporting on weather and water-supply conditions and issuing advance warnings of weather conditions and floods, the Bureau conducts a research and development program related to these functions. The program embraces the following fields of study: meteorology, atmospheric sciences, air-sea interaction, hydrology, climatology, atmospheric physics, air pollution transport and dispersion, weather modification, aviation and agricultural meteorology, satellite meteorology, and instrument engineering. The Bureau also engages in the operational application of earth satellites to the field of meteorology.

Scientific information generated by the Weather Bureau is disseminated in a variety of publications, among which the following are available to the public for purchase through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402: *Monthly Weather Review,* the principal medium for reports on original contributions in all fields of meteorological research in which the Bureau is engaged; *Research Papers,* a series published irregularly, which contains reports of original research on specific meteorological problems; *Hydrometeorological Reports,* a series issued irregularly and devoted to hydrometeorological investigations conducted by the Weather Bureau for the U.S. Army Corps of Engineers; *Technical Papers,* also an irregular series, presenting compiliations of processed and analyzed meteorological and climatological data; *Daily Weather Maps, Northern Hemisphere Sea Level and 500-mb. Maps,* and *Data Tabulations,* two monthly booklets which are part of the Bureau's *Synoptic Series; Average Monthly Weather Outlook,* a semimonthly; *Key to Meteorological Records Documentation,* issued irregularly and providing guidance on data sources, past observational practices, and other information needed for interpretation of meteorological data records; *Manuals of Observations, Codes, and Instruments,* published irregularly; *Climatological Data-National Summary,* a monthly periodical containing selected data for the United States; *Climatological Data by Sections of U.S.; Local Climatological Data,* issued monthly with supplements and an annual issue, listing daily and hourly observational data for individual weather stations; *Storm Data,* published monthly, containing tables and data on storms and storm damage reported in the United States during the month; *Weekly Weather and Crop Bulletin,* designed for agriculturists, summarizing the weather and its effect on crops and farm activities across the country; *Climatography of the United States,* issued irregularly, providing summarized climatological data and analyses for various localities and regions; *Daily River Stages,* an annual publication containing cumulative monthly tabulations of daily data on stages of the main rivers in the United States.

Publications not for sale but made available to the scientific and technical community on request are: *Daily 100-mb. and 50-mb. Synoptic Weather Maps; Three-Times Monthly 10-mb. Synoptic Weather Maps; Bibliographies* on special topics as required by the Weather Bureau and cooperating agencies; *Translations* of foreign papers, reports, and books as required by the Bureau; *National Hurricane Research Project Reports; Meteorological Satellite Laboratory Reports; National Severe Storms Project Reports;* and *Mariners Weather Log,* a bimonthly periodical reporting ocean weather and climatological information of interest to the maritime industry.

Library

Mail:
U.S. Weather Bureau
Washington, D.C. 20235

Location:
Federal Office Building 4
Suitland, Md.
Telephone: 735-2000 Extension 7291 (Area code: 301)

By purchase, gift, and exchange, the Weather Bureau Library collects scientific and technical publications in meteorology and related fields from all parts of the world. Copies of all Weather Bureau publications are retained by the Library. In addition to a main catalog covering books, monographs, and bound serials, there is a special analytic catalog for journal articles providing references by author, title, and subject.

The Library is open to the public, and reference service is available. Limited literature searches are made when necessary to satisfy specific requests. Material is available for loan; orders for photocopies should be placed with the Photoduplication Service, Library of Congress, Washington, D.C., 20540.

National Meteorological Center

Mail:
U.S. Weather Bureau
Washington, D.C. 20235

Location:
Federal Office Building 4
Suitland, Md.
Telephone: 735–2000 Extension 7246 (Area code: 301)

Operational around the clock, the Center analyzes meteorological reports as they are received and forecasts the future states of the atomsphere covering areas as large as the Northern Hemisphere from sea level to about 60,000 feet as frequently as eight times daily. In addition to short-range forecasting, it prepares 5-day forecasts and 30-day outlooks. As part of its automation program, the Center performs research in the field of numerical weather prediction in order to develop new techniques for prediction and for the application of computers to daily forecasts. NMC products are transmitted by facsimile and teletypewriter to stations of the national weather network and various specialized networks within 3½ hours after observation time.

Questions regarding weather forecasts for any location in the world for any period of time should be directed to the local forecast office of the U.S. Weather Bureau, which will obtain information, when necessary, from the National Meteorological Center.

National Weather Records Center

U.S. Weather Bureau
Federal Building
Asheville, N.C. 28801
Telephone: 253–0481 (Area code: 704)

The Weather Bureau's National Weather Records Center serves as the Nation's weather archives. It contains nearly every weather record for the United States and its possessions and receives reports from some 15,000 surface weather observing stations in the United States and the Caribbean; it also has a collection of meteorological data obtained by aircraft, rocket, and satellite observations.

Access to the records is permitted, and guidance in their use is provided without charge. Copies of original records, hand and machine tabulations, chart and map analyses, and relationship studies may be obtained at cost. Technical inquiries are answered free when the search requires less than an hour and for a fee when an extended search is necessary. Inquiries may be made in person or by mail, telephone, or wire; replies will be made as requested, with the charges borne by the questioner.

U.S. DEPARTMENT OF DEFENSE

Defense Documentation Center

Cameron Station
Alexandria, Va. 22314
Telephone: 698–1981 (Area code: 202)

The Defense Documentation Center is the central depository of the Department of Defense for scientific and technical documents. By regulation, the U.S. Army, Navy, Air Force, Marine Corps, and all other Department of Defense components, their contractors and grantees, provide DDC with classified and unclassified reports. On a reciprocal or voluntary basis, reports are also received from other U.S. Government agencies and several foreign nations. The collection totals more than 700,000 documents, covering all fields of science and technology, including aerospace; biological and medical sciences; chemical, biological, and radiological warfare; chemistry; communications; detection and counter-measures; earth sciences and astronomy; electrical and electronic engineering; fuels; guided missiles; materials and metallurgy; mathematics and data processing; mechanical and structural engineering; military sciences; navigation and guidance; nuclear science and technology; ordnance; photography; physics; propulsion; research and research equipment; ships and marine equipment; and vehicles and transportation.

DDC makes its holdings available on request without charge to all executive Government agencies and to the contractors or grantees which these agencies have approved for DDC services. Bibliographic searches are made and various reference publications compiled to assist searchers. Nearly half of the DDC collection is computerized for fast searching. For some 50 subjects, in frequent demand, DDC has compiled listings of all related documents and these publications are immediately available to authorized users.

For the military, DDC has available for computer delivery, on request, management information on current research, development, test, and evaluation tasks of all Department of Defense components. This service tells who is doing what, where, and provides funding and related data. Information on unclassified activities is furnished to the Science Information Exchange at the Smithsonian Institution for use in the public domain.

To each of the 6,000 military, Government, industrial, and educational organizations authorized to use its services, DDC distributes a *Technical Abstract Bulletin* twice a month, containing bibliographic citations and abstracts of documents received. Documents cited can be obtained by individual request, using a card form prepunched with the user's DDC code number.

The Center also operates a referral service, covering the activities within the Department of Defense. This function is coordinated with the National Referral Center for Science and Technology at the Library of Congress.

Department of the Air Force

Aerospace Medical Research Laboratories

U.S. Air Force Systems Command
Wright-Patterson Air Force Base, Ohio 45433
Telephone: 253–7111 Extension 39267 (Area code: 513)

The Aerospace Medical Research Laboratories perform research in the biomedical and behavioral sciences as related to aerospace flight and investigate the development of life support systems. Research is supported by a technical library that houses a collection of reports from medical elements of the U.S. Department of Defense, dating back to 1935, and an indexed collection of 1,800 reports from the Royal Air Force Flying Personnel Research Committee of Great Britain, dating back to 1939. The library is accessible for direct use, subject to security regulations. An interlibrary loan service is provided to universities.

Research results are disseminated in technical documentary reports, which are distributed to universities, aircraft corporations, hospitals, and research organizations. They are available to the Department of Defense and its contractors through the Defense Documenation Center. Those suitable for distribution to the general public are available at nominal cost through the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234. A significant series of AMRL reports is produced under the direction of the National Academy of Sciences-National Research Council's Committee on the Handbook of Biological Data. The *Handbook of Circulation of the Blood and Other Body Fluids* and future publications in the series may be purchased from the Federation of American Societies for Experimental Biology, 9650 Wisconsin Avenue, Bethesda, Md., 20014.

Air Force Materials Laboratory (MAAM)

U.S. Air Force Systems Command
Wright-Patterson Air Force Base, Ohio 45433
Telephone: 253–7111 Extensive 26207 (Area code: 513)

The Laboratory collects data on the mechanical, physical, and thermophysical properties of all materials and some additional properties of metals and alloys, including supplementary classes and groups of materials, such as electrical and electronic encapsulating materials and structural plastics. A special unit within the Laboratory is concerned with the mechanical and physical properties of ceramics and graphite, their processing, and propulsion and structural applications.

Information is available to qualified requesters.

Office of Aerospace Research

Tempo D Building
Fourth and Independence Avenue SW.
Washington, D.C. 20333
Telephone: 696–1386 or 696–2695 (Area code: 202)

The Office of Aerospace Research plans and manages the Air Force research program, which covers such technical areas as general physics, nuclear physics, chemistry, mathematical sciences, electronics, materials, mechanical sciences, energy conversion, earth sciences, astronomy and astrophysics, biological and medical sciences, and behavioral and social sciences. In addition, certain portions of the exploratory development program in the areas of environment and aerospace environment are conducted by OAR.

OAR research results are disseminated to the scientific community primarily by means of publications. Summaries of OAR unclassified projects are compiled in *Basic Research Resumés,* a volume issued regularly and available for purchase from the Office of Technical Services of the Department of Commerce, Washington, D.C., 20234. Announcement information and bibliographic data for all OAR reports are contained in the *OAR Cumulative Index of Research Results* for the period January 1959 to December 1962. A yearly publication, *OAR Cumulative Index of Research Results* is published to list the reports of the calendar year just completed. *OAR Research Review,* providing information on specific research projects, is issued monthly. Requests to be placed on the mailing list should be directed to Headquarters, OAR, Attention RRY.

School of Aerospace Medicine

U.S. Air Force Systems Command
Brooks Air Force Base, Tex. 78236
Telephone: 532–8811 Extension 7205 (Area code: 512)

The School of Aerospace Medicine provides research and training in a wide range of subjects related to aviation and space medicine, such as aircraft accidents, escape and survival techniques, medical and dental sciences, pharmacology and biochemistry, radiation effects, and human engineering. It also gives biomedical support to the development and operation of weapon systems involving atomic energy and biological warfare and develops procedures for utilizing results of aeromedical research in special systems.

A library maintained by the School acquires books, journals, and reports on all aspects of aerospace medicine. Reports are collected from the Air Force, other Government agencies, and the scientific community. The library provides bibliographic and reference services to School of Aerospace Medicine personnel, and to local physicians as time permits.

Research is reported in three types of publications: *Research Reports,* consisting of reports of original research and results of assigned projects or tasks; *Aeromedical Reviews,* interpretative studies written by School of Aerospace Medicine personnel in areas of specific interest to the authors; and *Special Reports,* which include byproducts of an assigned task, negative findings, or preliminary observations. These publications, with the exception of *Special Reports,* are distributed automatically to a mailing list of professional societies, universities, physicians, dentists, and other scientific and professional personnel. The mailing list is revised once each year and areas of interest are checked. Requests to be placed on the list should be addressed to SAMRSCH–P, Brooks Air Force Base, Tex., 78236.

Department of the Army

Coastal Engineering Research Center

5201 Little Falls Road NW.
Washington, D.C. 20016
Telephone: 462–8000 (Area code: 202)

The mission of the Center is to conceive, plan, and conduct research and development in the field of coastal engineering in order to provide a better understanding of shore processes, winds, waves, tides, surges, and currents as they apply to navigation improvements, flood and storm protection, beach erosion control, and coastal engineering works. A collection is maintained of books, journals, selected journal articles, films, photos, maps, and charts drawn from sources in all major languages.

An annual bulletin and technical memoranda are published by the Center for distribution to other U.S. Army Corps of Engineers organizations, educational institutions, and libraries in this country; they are also disseminated by exchange agreement with libraries and educational and research institutions abroad. Consulting services are available free or for a fee, depending upon the magnitude of the problem.

Plastics Technical Evaluation Center

Picatinny Arsenal
Dover, N.J. 07801
Telephone: 328–4222 (Area code: 201)

Operated by the U.S. Army for the Department of Defense, PLASTEC serves as a data analysis center and clearinghouse for information on plastics technology from basic research through fabrication, with emphasis on information likely to be useful to the design engineer. Among subject areas covered are reinforced plastics, including filament winding, electrical and electronic uses of plastics, packaging, surveillance and compatibility of plastics, fluidized bed coatings, and fabricated items, such as gears and bearings. Information is gathered through visits to plastics plants and laboratories, and through the acquisition of Government and industrial reports, technical journals, patents, and data, which are reviewed, evaluated, and indexed for ready reference purposes.

In response to technical inquiries, PLASTEC provides direct answers when possible, performs literature searches when necessary for a reply, and in some cases enlists the cooperation of other agencies in order to satisfy requests for specific information. The Center also publishes state-of-the-art and technical reports. These as well as inquiry services are available without charge to all agencies of the U.S. Department of Defense and their contractors and suppliers, those requiring information to become contractors, universities, technical libraries, the National Aeronautics and Space Administration, and the U.S. Atomic Energy Commission. Anyone may request to be placed on the distribution list for PLASTEC reports and services; eligibility is determined by the Center, generally in accord with the particular DOD-related activity.

Department of the Navy

Hibernation Information Exchange

℅ Office of Naval Research
230 North Michigan Avenue
Chicago, Ill. 60601
Telephone: 828–6065 (Area code: 312)

An information center sponsored by the Office of Naval Research, the Hibernation Information Exchange collects journals, books, and data on natural mammalian hibernation and other torpidities, such as artificial hibernation, nonmammalian hibernation, pseudohibernation, aestivation, sleep, and hypothermia. Foreign literature and data include technical journals in German, French, Italian, and Russian.

The Center maintains international liaison among research authorities on natural mammalian hibernation. Information services are provided without charge on an exchange basis with specialists in the field, who make available their own publications and notes. Questions on specific hibernation projects are answered, and a referral service employing member specialists is available. The Center performs literature searches, prepares bibliographies and data compilations, and provides translations of certain selected papers. Holdings are accessible for direct use by bona fide researchers. Some material is available for loan.

Publications which are distributed without charge to members and to a limited number of requesters, include *List of Acquisitions* and an *Information Sheet*, both prepared monthly. Members are selected on the basis of their interest in and active research on mammalian natural hibernation.

U.S. National Oceanographic Data Center

Naval Weapons Plant
M Street at Eight Street SE.
Washington, D.C. 20390
Telephone: 547–5700 (Area code: 202)

Administered by the Naval Oceanographic Office, the Center serves as a national clearinghouse for bathythermographic and oceanographic station data. Physical and chemical data and wave and sea surface temperature observations in various forms are collected and processed. Oceanographic station data relate largely to the North Atlantic, but increasing amounts of Pacific and Indian Ocean data are being processed. The Center also collects pertinent technical reports, journals, and scientific literature in the major western European languages, Russian, and Japanese. Information is exchanged with oceanographic organizations in the United States and abroad.

The Center answers technical questions and, on request, provides data in the form of listings, summaries, tabulations, or punched cards at cost. Requests for data should contain the specific type of data desired, limits of the geographic area, and other pertinent information to assist the Center in defining the request. Cost estimates and approximate delivery data are furnished in advance. Arrangements can be made to maintain a fund or working account against which costs can be charged. Also available at cost are such services as abstracting, translating, literature searches, data compilations, and analyses. On-site use of the data is free, except for computer rental. The Center will process and tabulate raw data for fieldworkers without charge, provided the data are deposited in the Center's collection.

The *NODC Newsletter*, issued eight times per year and containing information on the Center's programs and publications, is distributed without charge. Requests to be placed on the mailing list should be addressed to the Director of the National Oceanographic Data center.

U.S. Naval Observatory

Massachusetts Avenue
Washington, D.C. 20390
Telephone: 332–9013 (Area code: 174)

The U.S. Naval Observatory makes continual observations of the positions and motions of celestial bodies and calculations of their predicted positions as required for the navigation of ships and aerospace vehicles. It is developing a celestial reference system based on a continuous series of observations of the sun, moon, planets, and 40,000 brighter stars and, in cooperation with 20 other observatories, is determining the position of 400,000 additional stars in relation to the reference stars. Other research includes investigations of double stars, galactic clusters, and galactic structures. The Observatory is also the source of all standard time in the United States, maintaining a quartz-crystal atomic clock accurate to one-millionth of a second per day.

The Naval Observatory library has a collection of books, journals, and data in the fields of astronomy, geodesy, mathematics, physics, and navigation, including nautical almanacs of all countries. There is a collection of rare books on astronomy and mathematics printed before 1800. Foreign literature and data include published astrometric observations in English, French, and German.

Technical questions are answered, data compilations are prepared upon request, and technical-consultant services are provided to Government contractors and professional scientists and engineers. There is no fee. The library is available for on-site reference use to scientists, other Government agencies, students, and other researchers. Material is available through interlibrary loan and through exchange.

Publications available for sale at the Superintendent of Document, U.S. Government Printing Office, Washington, D.C., 20402, are *The American Ephemeris and National Almanac*, issued annually; *The Air Almanac*, issued three times a year; and *Astronomical Papers*, issued irregularly. *Publications of the U.S. Naval Observatory*, a report series, is available to qualified requesters without charge from the Observatory.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

The major functions of the Public Health Service are to conduct and support research and training in the medical and related sciences, and in public health methods and administration; provide medical and hospital services for persons authorized to receive care from the Service; aid in developing the country's hospital and related facilities and prevent introduction of communicable diseases; assist the States and local governments in applying new knowledge to the prevention and control of diseases; furnish technical aid to other nations, through the Department of State and international health organizations; and compile and publish health statistics.

Major components of the Public Health Service as sources of scientific and technical information include the Office of the Surgeon General, the National Library of Medicine, the National Institutes of Health, the Bureau of State Services, and the Bureau of Medical Services.

Inquiries Branch, Office of Information and Publications

Public Health Service
Fourth and Independence Avenue SW.
Washington, D.C. 20201
Telephone: 963–6227 (Area code: 202)

The Office of Information and Publications, Office of the Surgeon General, serves as the primary source of information offered by all of the programs of the Public Health Service. Information which may be obtained includes health statistics; data on water supply and control, including industrial wastes, air pollution, food, air, and water protection; accident incidence and prevention; poisons and their control; radiological health data; occupational health hazards and their control; communicable diseases; chronic illnesses, such as heart disease; cancer, mental illness; dental health; neurological diseases and blindness; arthritis and the metabolic diseases; child health and human development; data on nursing and hospitals; the health status and problems of the American Indian and Alaskan natives; information on world health problems and international health organizations; biomedical research and its progress here and abroad; hospital and health center construction; mental retardation; health education; and other health information.

National Library of Medicine

8600 Wisconsin Avenue
Bethesda, Md. 20014
Telephone: 656–4084 (Area code: 212)

The National Library of Medicine has holdings in excess of a million books, journals, theses, pamphlets, prints, and microfilms. Material is collected on every aspect of medicine, including dentistry, pharmacy, nursing, and related disciplines in the basic biomedical sciences. All major languages are represented. It has a unique collection on the history of medicine, consisting of incunabula, early medical Americana, and other monographs published before 1801, as well as a special section of historical reference works and bibliographies. The Library participates in programs involving the translation of biological and medical literature in Polish, Serbo-Croatian, Japanese, and Russian. It acts as agent for the exchange of PHS publications, and conducts exchanges with more than 1,500 institutions in Europe, Latin America, and the Soviet Union. In 1963, the Library established a computer-based system known as MEDLARS (Medical Literature Analysis and Retrieval System) to support its bibliographical services.

Only libraries may borrow from the collections and are expected to utilize local resources before directing requests to the National Library of Medicine. Individuals may borrow through their local libraries or use the Library's materials on the premises. Publications generally accessible elsewhere are not loaned. Requests for material on the history of medicine are considered on an individual basis. Usually, if the original cannot be sent, as in the case of journals, a photoprint copy is provided in its place without charge. Works such as portraits, photographs, etchings, and caricatures are not available for loan, but photographic copies can be furnished on a reimbursable basis; cost estimates are available on request.

Questions requiring a brief search are answered by telephone. Literature searches are undertaken as facilities permit in response to detailed written requests. This service is available only to those who have exhausted the resources of their local libraries.

The Library does not provide translation services, but it attempts to locate existing translations or English language abstracts of specific items, and it maintains a register of commercial translators. Some translations resulting from the Library's translation programs are available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234. Others are available from the Federation of American Societies for Experimental Biology, 9650 Wisconsin Avenue, Washington, D.C., 20014.

Three types of publications are issued by the National Library of Medicine: Indexes; catalogs; and bibliographies and bibliographic aids. *Index Medicus,* a monthly index of current literature, is available on yearly subscription from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. *Medical Subject Headings,* the Library's subject heading authority list, is also available from the Superintendent of Documents. Available from the Card Division of the Library of Congress, Washington, D.C., 20540, is the *National Library of Medicine Catalog,* an annual compilation of books received and cataloged by the National Library of Medicine. *Biomedical Serials, 1950–60,* a reference aid, is a list of biomedical periodicals acquired by the Library during the 1950–60 period; it is available from the Superintendent of Documents. Bibliographic publications issued by the Library include *Bibliography of Medical Reviews,* an annual subject listing of current medical review articles that is also available from the Superintendent of Documents; *Bibliography of Medical Translations, January 1959–June 1962,* obtainable without charge from the Library; and a number of bibliographies in mimeographed form also distributed by the Library on request.

U.S. DEPARTMENT OF THE INTERIOR

Bonneville Power Administration

U.S. Department of the Interior
1002 North East Holladay Street
Portland, Oreg. 97208
Telephone: 234–3361 (Area code: 503)

A marketing agency for the hydroelectric generating plants of the Columbia River Power System, the Bonneville Power Administration maintains an engineering research program, carried out largely through contracts with educational institutions, and a program of testing and analysis conducted at the Administration's own laboratory in Vancouver, Wash. Electrical utilities materials testing is conducted for abrasion, creep, slippage, strength, and vibration. High-voltage testing and chemical and metallographic analyses are also performed.

A monographic series is issued, describing the progress of the projected 10-year power program for the Pacific Northwest. *Advance Program, 1963–1973,* the most recent in the series, is available without charge.

Bureau of Land Management

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 737–1820 Extension 33609 (Area code: 202)

General publications available from the Information Office cover Bureau of Land Management activities on 464 million acres of public land in the 11 far western States and Alaska. These activities include cadastral surveying, engineering, range and forest management, wildlife habitat management, mineral leasing, classification and disposition of lands, and protection of lands and resources. Historical and technical material published from time to time covers special phases of the Bureau and its work.

Our Public Lands, a popularly written, illustrated quarterly magazine, contains historical and educational material as well as articles on the latest developments in conservation and management of the Nation's public lands. It is available on subscription from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Visual and audio-visual materials spotlighting various Bureau activities include a still photography file, a color slide series entitled "Western Wildlife", three half-hour and one 11-minute films, and eight traveling exhibits showing various phases of land and resource management. These visual and audio-visual aids may be obtained through the BLM Information Office by reproduction or loan.

Bureau of Mines

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 343–4815 (Area code: 202)

The fundamental goals of the Bureau of Mines' research programs are the conservation of the Nation's mineral wealth; the wise and efficient use of coal, petroleum, natural gas, helium, metals, nonmetals, and other commodities of mineral origin; and the prevention of accidents and the promotion of safety and healthful working conditions in the mineral industries.

Information about the Bureau's research activities is available primarily through its publications. In general, publications distributed without charge may be obtained from the Publications Distribution Section, Bureau of Mines, 4800 Forbes Avenue, Pittsburgh, Pa., 15213. Only one copy of any free publication and only a few different items can be sent to any one applicant. All priced Bureau of Mines publications may be purchased only from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402.

Nonperiodical publications include the following: Bulletins consisting of information compendiums or major bibliographies, handbooks on efficiency and safety in the mineral industries, and information circulars consisting of reports, reviews, and digests, all of which are sold by the Superintendent of Documents; mine disaster reports, available from the Bureau; and reports of investigations, most of which are available from the Bureau, but a few of which are sold by the Superintendent of Documents.

The following periodicals are prepared by the Bureau: *Minerals Yearbook,* issued annually in three volumes, *Metals and Minerals, Fuels,* and *Area Reports,* all sold by the Superintendent of Documents; *Mineral Industry Surveys,* statistical and economic reports issued weekly, monthly, quarterly, and annually, which are available at the Bureau; foreign mineral reports, consisting of the monthly *Mineral Trade Notes,* the monthly *International Coal Trade,* the monthly *International Petroleum Trade,* and the quarterly *World Petroleum Statistics,* all of which are available from the Bureau; and health and safety statistics publications which include the monthly *Coal Mine Injuries,* the monthly *Coal Mine Fatalities,* and the quarterly *Health and Safety Surveys,* all available from the Bureau. There is an annual cumulative listing of new publications for each calendar year, entitled *List of Bureau of Mines Publications and Articles,* sold by the Superintendent of Documents.

Motion pictures describing scientific, technological, and economic activities of the Bureau are provided free to responsible organizations from the Graphic Services, Bureau of Mines, 4800 Forbes Avenue, Pittsburgh, Pa., 15213. A catalog is available.

Albany Metallurgy Research Center

U.S. Bureau of Mines
Post Office Box 492
West Queen Avenue
Albany, Oreg. 97321
Telephone: 926–1521 (Area code: 503)

The Center conducts basic and applied research in mineral dressing, chemical metallurgy, pyrometallurgy, physical metallurgy, thermodynamics, and ceramics. Rare earths are studied in terms of their basic properties, as well as methods of separation, analysis, metal reduction, and refining. Basic thermodynamic data are collected on heat capacity, heat of formation, entropy, and other properties of metals and compounds. The Center operates a Cobalt-60 facility for high-radiation research and maintains a specialized data collection on zirconium and hafnium.

Technical questions are answered and technical-consultant services are provided free of charge. The collection is accessible for direct use by approved visitors; translations and bibliographies are prepared. Research results are published in reports.

Anthracite Research Center

U.S. Bureau of Mines
Schuylkill Haven, Pa. 17972
Telephone: 385–1097 (Area code: 717)

The Anthracite Research Center conducts programs in mining research and mine water control and collects and compiles data on mine production and accident statistics. Anthracite coal is studied in terms of its chemical, electrical, and physical properties; hydraulic anthracite mining systems are designed; and data on the performance of anthracite briquets in a blast furnace are evaluated. In the area of mine water control, the effects of surface improvement of river basins and deep-well pump installations are studied. The Center maintains a library of works on anthracite coal.

Technical questions are answered or are referred to specialists for reply. The Center provides free consultation services. Research results are published in reports.

Applied Physics Laboratory

U.S. Bureau of Mines
College Park, Md. 20740
Telephone: 864–3100 (Area code: 301)

The Applied Physics Laboratory conducts research in the broad field of physics as related to all phases of mineral mining. Research includes fundamental studies of the physical nature of rock and rock structures and the physical processes involved in the various elements of the mining process.

Technical questions are answered or are referred to specialists for reply. The Laboratory provides free consultation services. Research results are published in reports.

Bartlesville Petroleum Research Center
U.S. Bureau of Mines
Virginia and Cudahy Streets
Bartlesville, Okla. 74003
Telephone: 336–2400 (Area code: 918)

The research program of the Center covers the production, transportation, storage, processing, and utilization of crude oil, natural gas, related materials, and their products and byproducts. A library is maintained, dealing with the composition and properties of crude oil; natural gas; petroleum chemistry; composition, structure, properties, and thermal reaction of oil shale; primary and secondary methods of petroleum production; refining; thermodynamics of petroleum compounds; hydrogenation; stability of liquid fuels; transportation and storage of oil and natural gas; and prevention of deterioration in storage. Holdings consist of books, journals, reports, and pamphlets in English, German, French, and Russian. An extensive file of crude-oil analyses from oilfields in the United States and foreign countries is available for inspection.

Technical questions are answered, literature searches performed, and bibliographies prepared. There is no charge. The collection is accessible for direct use by approved visitors; material is available on interlibrary loan.

Berkeley Thermodynamics Laboratory
U.S. Bureau of Mines
Hearst Mining Building
Berkeley, Calif. 94720
Telephone: 848–4088 (Area code: 415)

A branch of the Reno Metallurgy Research Center, the Laboratory conducts research on the thermodynamics of inorganic elements and compounds.

Technical questions are answered directly or are referred to specialists for reply; consultations are provided to the general public free of charge. Research findings are published in reports.

Boulder City Metallurgy Research Laboratory
U.S. Bureau of Mines
500 Date Street
Boulder City, Nev. 89005
Telephone: 293–1033 (Area code: 702)

A branch of the Reno Metallurgy Research Center, the Laboratory conducts portions of the Center's program in chemical metallurgy, pyrometallurgy, and electrometallurgy.

Technical questions are answered or are referred to specialists for reply. The Laboratory provides free consultation services. Research results are published in reports.

College Park Metallurgy Research Center
U.S. Bureau of Mines
College Park, Md. 20740
Telephone: 864–3100 (Area code: 301)

The Center carries out basic and applied research in hydrometallurgy, pyrometallurgy, electrometallurgy, ceramics, and the preparation of synthetic materials. It develops methods of producing several metals in very pure form, particularly tungsten, molybdenum, and vanadium; collects data on the corrosion resistance of high-purity metals and alloys; and investigates methods for protecting refractory metals and nonmetals from oxidation and corrosion at high temperature. The Center also conducts studies on methods of extracting and refining base metals, particularly tin, copper, and lead. Other projects concern the properties of refractory ceramic materials and the fabrication and evaluation of refractory hard materials. The Center's Industrial Water Laboratory analyzes feed and boiler water for U.S. Government heating plants and makes recommendations for chemical treatment to prevent scale, corrosion, and caustic embrittlement. A collection of reports, journals, data, and patents is maintained on metallurgy.

The Center provides answers to technical questions and technical consultant services without charge. Its collections are accessible for direct use by approved visitors, and reports may be borrowed for short periods. Literature searches and data compilations are provided on request. Research results are published in reports.

Denver Mining Research Center and Coal Research Laboratory
U.S. Bureau of Mines
Building 20, Denver Federal Center
10001 West Alameda
Denver, Colo. 80225
Telephone: 233–3611 (Area code: 303)

The Denver Mining Research Center specializes in two areas of research: The development of engineering principles and mathematical techniques applicable to exploration, development, and operational problems in mining; and the study of rock mechanics as applied to ground control. The first area involves research on methods of ore sampling, mine-systems analysis, and applications of statistics to problems of mineral exploration. Research in the second area covers laboratory investigations aimed at a fuller understanding of how rock behaves under the loads imposed by mining, and field investigations to evaluate stress-strength relationships in full-scale operating mines. The Denver Coal Research Laboratory is concerned with the technology of utilization of Western coals, with particular reference to the drying and carbonization of lower rank coals of the Rocky Mountain area.

Technical questions are answered or are referred to specialists for reply. The Center and Laboratory provide free consultation services. Reports of research findings and pamphlets are prepared.

Grand Forks Lignite Research Laboratory

U.S. Bureau of Mines
15 North 23d Street
Grand Forks, N. Dak. 58201
Telephone: 774–4207 (Area code: 701)

The concern of the Grand Forks Lignite Research Laboratory is research on and the process development of lignite from the northern Plain States, specifically the use of artificially oxidized lignite and leonardite for soil conditioning and for fertilizing and the development of a fixed-bed slagging lignite gasifier.

The Laboratory is available for free consultations; technical questions are answered directly or are referred to specialists for reply. Research results are disseminated in reports and pamphlets.

Helium Research Center

U.S. Bureau of Mines
Amarillo, Tex. 79105
Telephone: 376–5151 (Area code: 806)

The Helium Research Center carries out both basic and applied research to discover helium supplies and to improve the process and methods of helium production, purification, transportation, liquefaction, storage, and utilization. Basic studies cover thermodynamic and other physical properties of helium; low-temperature materials for use in liquefaction and the development of production and utilization standards. Applied research involves the investigation of such problems as large-scale liquefaction and extraction processes of crude helium from natural gas. The Center maintains a basic data collection for use in the design and operation of helium plants which includes information on helium properties and applications, space and nuclear technology, cryogenics, welding, metallurgy, and medicine.

Technical inquiries are answered free and may be directed also to the Office of the Assistant Director, Helium, U.S. Bureau of Mines, Washington, D.C., 20240. Research findings are disseminated in technical reports.

Laramie Petroleum Research Center

U.S. Bureau of Mines
365 North Ninth Street
Laramie, Wyo. 82071
Telephone: 742–2117 (Area code: 307)

The Center conducts research and collects information relating to oil-shale technology, crude oil, natural gas, and their products and byproducts. Special projects include analyses of crude-oil samples taken from oilfields in the United States and some foreign countries; the accumulation of data on the properties of sulfur and nitrogen compounds of petroleum; oil-shale assays providing information on pyrolytic oil yields, particularly for the Green River formation in Colorado, Utah, and Wyoming; analyses of the composition and properties of oil shales and products from them; and study of techniques for producing and refining shale oil. Holdings consist of reports, journals, technical and scientific data, and patents. There is an extensive special file of crude-oil analyses available for inspection.

Technical questions are answered and state-of-the-art reviews are prepared. The collection is accessible for direct use; some documents are available on loan. There is no charge. Research results are published in reports.

Minneapolis Metallurgy Research Center

U.S. Bureau of Mines
East 58th Street at Mississippi River
Minneapolis, Minn. 55417
Telephone: 721–4821 (Area code: 612)

Basic and applied research is conducted by the Minneapolis Research Center in mineral dressing, hydrometallurgy, pyrometallurgy, thermodynamics, and physical chemistry. Investigations are made of new and improved iron blast furnace techniques, such as the pelletized feed, flotation processes for the beneficiation of iron ores, reductive roasting processes for the conversion of nonmagnetic iron minerals to magnetic minerals, and the physical chemistry of steelmaking.

Technical questions are answered or referred to specialists for reply. The Center provides free consultation services. Reports of research findings and pamphlets are prepared.

Minneapolis Mining Research Center

U.S. Bureau of Mines
East 58th Street at Mississippi River
Minneapolis, Minn. 55417
Telephone: 721–4821 (Area code: 612)

The Minneapolis Mining Research Center conducts basic and applied research on rock penetration and fragmentation and on the geologic and engineering aspects of water control in mining. The Center performs engineering studies and analyses and develops engineering principles applicable to the present technology of rock penetration and fragmentation.

Technical questions are answered or referred to specialists for reply. The Center provides free consultation services. Reports of research findings are published.

Morgantown Coal Research Center

U.S. Bureau of Mines
Collins Ferry Road
Morgantown, W. Va. 26501
Telephone: 542–9455 (Area code: 304)

The Center develops methods for converting coal into gas usable for industrial purposes, such as the synthesis of liquid fuels, gaseous fuels, and chemicals. Studies include the development of a coal-fired gas turbine, conversion of bituminous coal to high-B.t.u. gas by the hydrogenation of coal with a low hydrogen-to-coal ratio and by the reaction of coal, steam, and catalysts at high pressure, utilization of fly ash, and the pneumatic transport of fine coal. Methods are also developed for upgrading liquid components of coal, particularly those resulting from low-temperature carbonization of coals.

Technical questions are answered or are referred to specialists for reply. The Center provides free consultation services. Reports of research findings and pamphlets are prepared.

Morgantown Petroleum Research Laboratory

U.S. Bureau of Mines
Post Office Box 800
Morgantown, W. Va. 26504
Telephone: 328–2810 (Area code: 509)

The Laboratory conducts research on the recovery of petroleum by secondary methods. Studies include the application of in-situ combustion, acoustic, magnetic, and electrical energy, and miscible fluids for stimulating petroleum production; and evaluation of the susceptibility of eastern U.S. oil reservoirs to newer recovery techniques.

Technical assistance is provided without charge. Information is disseminated in reports and articles prepared by the Laboratory staff.

Norris Metallurgy Research Laboratory

U.S. Bureau of Mines
Norris, Tenn. 37828
Telephone: 7185 or 7186 (Area code: 615)

A branch of the College Park Research Center, the Norris Metallurgy Research Laboratory has experimental programs in pyrometallurgy, electrometallurgy, ceramics, and the preparation of synthetic materials. Techniques for casting high-temperature and refractory metals, alloying, and metal plating are investigated; studies are conducted on the preparation and evaluation of pure metals; and ceramics are analyzed in terms of their properties and application.

Technical questions are answered or are referred to specialists for reply. The Laboratory provides free consultation services. Reports of research findings and pamphlets are prepared.

Office of Program Coordination

U.S. Bureau of Mines
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 343–2214 or 343–2426 (Area code: 202)

This Office is responsible for the development of programs to solve problems of supply of mineral raw materials and to discover uses for metals and mineral products and fuels. Economic, statistical, scientific, and engineering studies are made in the areas of minerals, anthracite and bituminous coal, and petroleum. Information is also collected on foreign mineral industries and resources.

The Office answers specific technical questions pertaining to the mining of marine minerals; air and stream pollution; abatement of acid mine water pollutions; and nuclear applications in mining and mining legislation. There is no charge.

Office of the Assistant Director, Health and Safety

U.S. Bureau of Mines
18th and C Streets
Washington, D.C. 20240
Telephone: 343–5345 (Area code: 202)

Health and Safety Research and Testing Center

U.S. Bureau of Mines
4800 Forbes Avenue
Pittsburgh, Pa. 15213
Telephone: 621–4500 (Area code: 412)

The Health and Safety Office conducts a program of research and education in health and safety; makes inspections and investigates safety conditions in the mineral industries; performs tests of mining equipment and machinery; collects, analyses, and publishes accident statistics, and participates in recovery operations at fires and after explosions.

Research and testing are coordinated at the Health and Safety Research and Testing Center in Pittsburgh. Major areas of interest are color coding safety, communications methods, cryogenic materials hazards, spontaneous combustion hazards, electrical mechanical hazards, static electricity and explosion hazards, explosion technology, firefighting and control, health hazards and occupational diseases, illumination, injury-employment data, instrumentation, methane detectors and monitoring systems, respiratory protective equipment, recovery techniques, roof control, safety laws and regulations, safety and rescue equipment, underground sanitary installations, ventilation, and test methods for mining equipment.

Information services to the public include answers to technical questions, provided directly or by referral to specialists, and free consultations. Specific inquiries should be directed to the Washington office. General questions may be directed to the district and subdistrict offices located at the following addresses:

Health and Safety District Office
U.S. Bureau of Mines
District A
223 Federal Building
Wilkes-Barre, Pa. 18700
Telephone: 824–4677 (Area code: 717)

Health and Safety District Office
U.S. Bureau of Mines
District B
4800 Forbes Avenue
Pittsburgh, Pa. 15213
Telephone: 621–4500 (Area code: 412)

Health and Safety District Office
U.S. Bureau of Mines
District C
Post Office Box 112
Mount Hope, W. Va. 25880
Telephone: 877–6405 (Area code: 304)

Health and Safety District Office
U.S. Bureau of Mines
District D
Fifth Floor, Calder Building
Birmingham, Ala. 35203
Telephone: 323–8011 Extensions 3206 and 3289 (Area code: 205)

Health and Safety District Office
U.S. Bureau of Mines
District E
302 North Second Street
Vincennes, Ind. 47591
Telephone: 882–7617 (Area code: 812)

Health and Safety District Office
U.S. Bureau of Mines
District F
321 Federal Building
Duluth, Minn. 55802
Telephone: 722–4043 (Area code: 218)

Health and Safety District Office
U.S. Bureau of Mines
District G
1114 Commerce Street
Dallas, Tex. 75202
Telephone: 749–3415 (Area code: 214)

Health and Safety District Office
U.S. Bureau of Mines
District H
1457 Ammons Street
Lakewood, Colo. 80215
Telephone: 238–1335 (Area code: 303)

Health and Safety District Office
U.S. Bureau of Mines
District I
Norton, Va. 24273
Telephone: 703–1230 (Area code: 703)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District A
329 Federal Building
Albany, N.Y. 12201
Telephone: 463–5581 Extension 252 (Area code: 518)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District B
239 East Main Street
St. Clairsville, Ohio 43950
Telephone: 695–2297 (Area code: 614)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District C
Collins Ferry Road
Morgantown, W. Va. 26500
Telephone: 542–9455 (Area code: 304)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District D
Federal Building
Jellico, Tenn. 37762
Telephone: 424–6155 (Area code: 615)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District G
Post Office Box 763
509 South Third Street
McAlester, Okla. 74502
Telephone: 423–5966 (Area code: 918)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District H
5043 Federal Building
Phoenix, Ariz. 85026
Telephone: 261–3233 (Area code: 602)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District H
570 15th Street
Oakland, Calif. 94612
Telephone: 834–4121 Extension 457 (Area code: 415)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District H
1600 East First South Street
Salt Lake City, Utah 84105
Telephone: 328–2911 Extension 55, 56, 57 (Area code: 801)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District H
45 Federal Office Building
Seattle, Wash. 98104
Telephone: 682–3300 Extension 277 (Area code: 206)

Health and Safety Subdivision Office
U.S. Bureau of Mines
District H
Room 2, Federal Building
Post Office Box 2259
Anchorage, Alaska 99501
Telephone: 278–8281 (Area code: 907)

Health and Safety Subdistrict Office
U.S. Bureau of Mines
District I
Post Office Box 572
Barbourville, Ky. 40906
Telephone: 546–4158 (Area code: 606)

Office of the Assistant Director, Mineral Resource Development

U.S. Bureau of Mines
18th and C Streets
Washington, D.C. 20240
Telephone: 343–4286 (Area code: 202)

The Mineral Resource Development Office makes examinations of mineral deposits, conducts studies of resource conservation and development and mineral-economic problems, and investigates mining and milling methods and costs in almost every State. Scientific technological, economic, and commercial data are collected on rocks, minerals, metallic and nonmetallic mineral elements and other mineral resources, such as asbestos, chalk, clay, cement, construction materials, diatomaceous earth, fertilizer materials, gem stones, greensand, gypsum, lightweight aggregate, meerschaum, pumice, mineral wool, nitrogen, salt, sand and gravel, slag, steel, stone, talc, water, arsenic, chromium, iodine, and natural gas.

Technical specialists at the Washington office answer questions on specific mineral commodities and provide consultations. There is no charge. Free consultations and other information services are also available at eight regional offices located at the following addresses:

Area I Mineral Resource Office
U.S. Bureau of Mines
4800 Forbes Avenue
Pittsburgh, Pa. 15213

Area II Mineral Resource Office
U.S. Bureau of Mines
301 West Cumberland Avenue
Knoxville, Tenn. 37904

Area III Mineral Resource Office
U.S. Bureau of Mines
East 58th Street at Mississippi River
Minneapolis, Minn. 55417

Area IV Mineral Resource Office
U.S. Bureau of Mines
206 Federal Office Building
Bartlesville, Okla. 74004

Area V Mineral Resource Office
U.S. Bureau of Mines
224 New Customhouse
721 19th Street
Denver, Colo. 80202

Area VI Mineral Resource Office
U.S. Bureau of Mines
420 Custom House
555 Battery Street
San Francisco, Calif. 94111

Area VII Mineral Resource Office
U.S. Bureau of Mines
West Queen Avenue
Albany, Oreg. 97321

Area VIII Mineral Resource Office
U.S. Bureau of Mines
Juneau, Alaska 99801

Reports of studies conducted by the Mineral Resource Development Office are published as a separate volume of the Bureau of Mines' *Minerals Yearbook*, available for purchase from the Superintendent of

Documents, Government Printing Office, Washington, D.C., 20402.

Pittsburgh Mining, Coal, and Explosives Research Centers

U.S. Bureau of Mines
4800 Forbes Avenue
Pittsburgh, Pa. 15213
Telephone: 621–4500 and 892–2400 (Area code: 412)

The Centers' research programs relate to coal, mining, metallurgy, and explosives. Coal research involves the analysis of chemical structure and physical properties; studies in the fields of preparation, carbonization, utilization, transportation and storage; and investigations on the production of synthetic fuels and chemicals, including methods of direct hydrogenization and catalytic conversion of carbon monoxide and hydrogen. Projects in mining include the development of coal mining methods and equipment. Research in metallurgy, performed for the Minneapolis Metallurgy Research Center, involves work in pyrometallurgy. The research program in explosives covers specification testing of explosives; studies of the flame and explosion characteristics of gases, vapors, and potentially hazardous chemicals, and investigations of uncontrolled fires and explosions.

Specialized collections of reports, journals, and data are maintained relating to explosives and explosions; to coal mining, with particular coverage in hydraulic mining, degasification of coalbeds, formation of acid mine water; and to coal preparation and utilization.

Technical questions are answered and technical consultations are provided without charge to the public. Materials are available for on-site reference use; literature searches are made and data compilations and bibliographies are prepared on request. Research results are disseminated in reports and pamphlets.

Reno Metallurgy Research Center

U.S. Bureau of Mines
1605 Evans Avenue
Reno, Nev. 89505
Telephone: 323–1071 (Area code: 602)

The Center's area of interest covers basic and applied research in chemical metallurgy, pyrometallurgy, electrometallurgy, hydrometallurgy, and thermodynamics. Portions of the research program in chemical metallurgy, pyrometallurgy, and electrometallurgy are carried out at the Boulder City Metallurgy Research Laboratory, Nev., and in thermodynamics at the Berkeley Thermodynamics Laboratory, Calif. Data are collected on beneficiation, flotation, chemical extraction, solvent extraction, ore-dressing processes, electrolytic methods, alloying, metal-plating processes, and thermodynamics of inorganic elements and compounds.

Technical questions are answered or are referred to specialists for reply. The Center provides free consultation services. Research findings are disseminated in reports and pamphlets.

Rolla Metallurgy Research Center

U.S. Bureau of Mines
1300 Bishop Street
Rolla, Mo. 65401
Telephone: 364–3169 (Area code: 314)

The Rolla Metallurgy Research Center has basic and applied research projects in mineral dressing, chemical metallurgy, electrometallurgy, pyrometallurgy, and physical metallurgy. Techniques for reducing metal compounds to metals are studied, and properties and behavior of metals and alloys under a variety of conditions are evaluated. Investigations are made of electrolytic techniques for extracting and refining refractory high-temperature metals and electrolytic methods for the processing of rare metals. The Rolla Office of Mining Research, located at the same address, conducts research on problems of mine water control, particularly the effects of surface improvements of river basins on underground mines and the performance of deep-well pump installations.

Technical questions are answered or are referred to specialists for reply. Consultation services are available without charge.

Salt Lake City Metallurgy Research Center

U.S. Bureau of Mines
1600 East First South Street
Salt Lake City, Utah 84112
Telephone: 328–2911 Extension 21 (Area code: 801)

Basic and applied research is carried out by the Center in mineral dressing, hydrometallurgy, and pyrometallurgy. Information is collected on beneficiation, flotation, chemical extraction, solvent extraction, ore-dressing processes, electrolytic methods, alloying, and metal-plating processes.

Technical questions are answered or are referred to specialists for reply. The Center provides free consultation services. Research results are published in reports and pamphlets.

San Francisco Petroleum Research Laboratory

U.S. Bureau of Mines
1429 Appraisers Building
San Francisco, Calif. 94111
Telephone: 986–3111 Extension 2208 (Area code: 415)

The Laboratory is primarily concerned with developing more efficient extractive and processing techniques for petroleum and natural gas. Studies include primary and secondary methods of petroleum production, the prediction of reservoir performance through computer techniques, the injection of sea water to stimulate petroleum production, and fluid-flow problems.

Technical questions are answered directly or by referral to specialists. Technical assistance is rendered without charge. Information is also disseminated in reports and pamphlets prepared by the Laboratory.

Seattle Coal Research Laboratory

U.S. Bureau of Mines
217 Roberts Hall
University Campus
Seattle, Wash. 98105
Telephone: 525–8310 (Area code: 206)

The Seattle Coal Research Laboratory conducts research on coals of the Pacific Northwest, Rocky Mountain area, and Alaska, being primarily concerned with the development of improved coal preparation procedures.

The Laboratory answers technical inquiries directly or refers them to specialists for reply. Consultations are provided to the general public free of charge. Research findings are disseminated in reports and pamphlets.

Spokane Mining Research Laboratory

U.S. Bureau of Mines
1430 North Washington Street
Spokane, Wash. 99201
Telephone: 328–2810 (Area code: 509)

The Spokane Laboratory is primarily concerned with artificial stabilization of underground openings. Research is also conducted on methods of artificial support, including precast concrete, hydraulic stope fill, and explosively anchored rock bolts; and techniques and instruments for measuring rock stresses to achieve more efficient design of both underground and open-pit mine openings.

Information is made available to the public free of charge. Services include answers to technical inquiries, referrals to specialists, and consultations. Research findings are published in reports and pamphlets.

Tucson Metallurgy Research Laboratory

U.S. Bureau of Mines
1724 North Vine Avenue
Tucson, Ariz. 85717
Telephone: 624–1904 (Area code: 602)

A branch of the Salt Lake City Metallurgy Research Center, the Laboratory supports the Center's basic and applied research programs in mineral dressing, hydrometallurgy, and pyrometallurgy.

Technical questions are answered directly or through referral to specialists. Consulting services are provided without charge. Research results are published as technical reports.

Tuscaloosa Metallurgy Research Center

U.S. Bureau of Mines
Box L
University, Ala. 35486
Telephone: 758–0491 (Area code: 205)

The Center engages in metallurgical and chemical engineering research in thermodynamics, physical beneficiation, hydrometallurgy, pyrometallurgy, and extractive metallurgy. A collection of books, reports, journals, and data is maintained in the above areas.

Literature searches are performed, technical inquiries are answered, and data compilations are prepared upon request. Technical consultant services on chemical or metallurgical problems are provided free of charge. Material is available for on-site reference. The Center performs cooperative research on metallurgical problems with industrial firms and other Government agencies. Research results are disseminated in reports and pamphlets.

Bureau of Reclamation

U.S. Department of the Interior
Building 53
Denver Federal Center
Denver, Colo.
Telephone: 233–3611 (Area code: 303)

The principal functions of the Bureau of Reclamation are: To transform, through irrigation, arid and semiarid lands into productive farms; to maintain production through furnishing supplemental water on lands threatened with retrogression in desert or dry-land conditions; to provide municipal and industrial water supply; to provide for transmission and sale of electric energy, generated both at its own project and at those of the Corps of Engineers; and to develop and administer sound financial arrangements for repayment by project beneficiaries on the reimbursable costs incurred by the Government allocated to irrigation, municipal and industrial water, and power. Associated responsibilities are: reduction of flood hazards, river regulation, navigation improvements, conservation of fish and wildlife, control of sediment, abatement of salinity and pollution, and creation and enhancement of recreation opportunities.

Research is performed on dams and other structural problems; concrete and constituents thereof; hydraulics, including studies of spillways, outlet works, sediment-control structures, water conveyance-systems, water-measurement devices, and flow in aquifers; soil embankments and soil and rock foundations, including explanation sampling and testing species; geology; soils and water for agricultural purposes; protective coatings and bituminous materials; corrosion problems and techniques for cathodic protection; special techniques such as X-ray diffraction, chemical and thermal analysis of materials, and the application of radioisotopes; control of phreatophyte and aquatic weeds; hydrology relating to river regulation, runoff forecasting and water resources utilization: economic analyses of resource areas, water yields, and uses of water; water quality, including salt accumulations in groundwater and streams and oxygen depletion in streams and reservoirs; electric power as concerned with generation, transmission, and protective facilities; methods for reducing evaporation reduction losses from reservoirs; methods of reducing seepage losses from canals and reservoirs; and weather modification directed toward increasing precipitation in selected Bureau project areas.

A technical library of books, journals, and reports includes material in English, Russian, Italian, Spanish, Portugese, French, German, and other major languages.

The Bureau answers technical inquiries and its holdings of published materials are open to scientific and technical personnel outside the Bureau. Material is available for loan when items are not readily accessible from public or university libraries, but some items are available to the U.S. Government only because of the proprietary information being exchanged. Reference and bibliographic services are provided to Bureau personnel and to Government agencies engaged in cooperative projects with the Bureau. Limited translation capabilities are available in French, Russian, German, and Spanish.

The following types of publications are available for purchase from the Bureau: reclamation project data, reclamation instructions, design standards, manuals and tables, technical records of design and construction, engineering monographs, and Boulder Canyon project reports.

Publications Available for Sale, a price list, is provided free on request. Several series of technical reports are issued by the Bureau, reporting results of laboratory and field investigations. Most reports are published for official Bureau use only, but library loan copies are available. A number of bibliographies may be obtained upon request and a monthly list entitled *Library Accessions* is distributed to cooperating Government agency libraries.

Division of Information, Office of the Secretary

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 343–3171 (Area code: 202)

The Division of Information, Office of the Secretary, handles inquiries regarding general aspects of the Department of the Interior's current research programs in the conservation and management of natural resources. It also issues press releases announcing reports and publications on research conducted by the Department's various bureaus and offices, awarding of contracts, and other facts on the Department's activities and programs of interest to the general public and the scientific community. Questions concerning specific aspects should be directed to the appropriate bureau or office.

Fish and Wildlife Service

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 737–1820 (Area code: 202)

The U.S. Fish and Wildlife Service is composed of two Bureaus: the Bureau of Commercial Fisheries, responsible for commercial fisheries and certain marine mammals, and the Bureau of Sport Fisheries and Wildlife, responsible for sport fisheries, wild birds, and mammals.

General questions regarding the research program of the Service are answered at the headquarters office. Technical inquiries should be addressed to the proper Bureau or regional office.

Bureau of Commercial Fisheries
Fish and Wildlife Service
U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 343-4993 (Area code: 202)

The Bureau of Commercial Fisheries conducts research in cooperation with the States for the purpose of assuring the maximum yield of commercial fishery resources and the maintenance of a vigorous national fishery industry. The program embraces oceanography; basic and applied studies in biology, ecology, and yield of commercially important marine and freshwater fishes, shellfish, and seals; new and improved methods for catching, processing, and marketing fish and related fishery products; statistical and economic analyses of the fishery industry; and related efforts in chemistry and bacteriology. The following regional offices serve as points of contact for information on current programs:

Bureau of Commercial Fisheries
U.S. Fish and Wildlife Service
1319 Second Avenue
Seattle, Wash. 98101
Telephone: 682-3300 (Area code: 206)

Bureau of Commercial Fisheries
U.S. Fish and Wildlife Service
Don Ce Sar Building
St. Petersburg, Fla. 33706
Telephone: 363-5311 (Area code: 813)

Bureau of Commercial Fisheries
U.S. Fish and Wildlife Service
Dale Avenue
Gloucester, Mass. 01931
Telephone: 283-6410 (Area code: 617)

Bureau of Commercial Fisheries
U.S. Fish and Wildlife Service
5 Research Drive
Ann Arbor, Mich. 48104
Telephone: 662-5529 (Area code: 313)

Bureau of Commercial Fisheries
U.S. Fish and Wildlife Service
Juneau, Alaska. 99801
Telephone: 586-3511 (Area code: 907)

Bureau of Commercial Fisheries
U.S. Fish and Wildlife Service
101 South Seaside Avenue
Terminal Island, Calif. 90731
Telephone: 833-4457 (Area code: 213)

An area office is located at:

Bureau of Commercial Fisheries
U.S. Fish and Wildlife Service
2570 Dole Street
Honolulu, Hawaii 96812
Telephone: 962-181 (Area code: 808)

Periodicals prepared by the Bureau include *Commercial Fisheries Review,* issued monthly and available on request, and *Commercial Fisheries Abstracts,* issued monthly without charge to members of the fishery industries and allied areas. Research information is also disseminated in *Fishery Bulletin, Fishery Industrial Research, Special Scientific Report, Fisheries,* and *Data Report.* Some of these reports are offered for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Bureau of Sport Fisheries and Wildlife
Fish and Wildlife Service
U.S. Department of the Interior
18th and C Street NW.
Washington, D.C. 20240
Telephone: 737-1820 (Area code: 202)

The Bureau of Sport Fisheries and Wildlife conducts research, performs surveys and investigations, produces fry and fingerlings, and maintains refuges and sanctuaries in order to further the conservation of wild birds, mammals, and sport fish and to encourage the maximum use of these resources in cooperation with other Federal agencies, State governments, and private groups. Projects are performed in two areas: Fish husbandry and management, and conservation and management of wildlife resources. Five regional offices provide administrative services and supervision for approximately 500 field installations, including fish hatcheries, wildlife refuges, and research laboratories. These offices are located at the following addresses:

Bureau of Sport Fisheries and Wildlife
U.S. Fish and Wildlife Service
1200 Northeast Holladay Street
Portland, Oreg. 97208
Telephone: 234-3361 (Area code: 503)

Bureau of Sport Fisheries and Wildilfe
U.S. Fish and Wildlife Service
Federal Office Building
Albuquerque, N. Mex. 87101
Telephone: 247-0311 (Area code: 505)

Bureau of Sport Fisheries and Wildlife
U.S. Fish and Wildlife Service
1006 West Lake Street
Minneapolis, Minn. 55408
Telephone: 339-3612 (Area code: 612)

Bureau of Sport Fisheries and Wildlife
U.S. Fish and Wildlife Service
Peachtree Street-Seventh Building
Atlanta, Ga. 30309
Telephone: 876–3311 (Area code: 404)

Bureau of Sport Fisheries and Wildlife
U.S. Fish and Wildlife Service
1105 Blake Building
59 Temple Place
Boston, Mass. 02111
Telephone: 223–2961 (Area code: 617)

Research findings are made available in the official publications of the Bureau. *Sport Fishery Abstracts,* issued quarterly and providing approximately 1,000 abstracts each year from English, German, Italian, Japanese and Russian literature, is available on request from the Bureau. Also available from the Bureau are the following annual reports: *Progress in Sport Fishery Research; Annual Report of the Division of Wildlife Research; Federal Aid in Fish and Wildlife Restoration;* and *Survey of Pittman-Robertson Activities,* issued by the Bureau to keep the wildlife profession informed of research carried out under the Wildlife Restoration Program. *Wildlife Review,* issued quarterly, provides about 1,700 abstracts yearly on wildlife management and is available for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Two index volumes have been published: *Wildlife Abstracts 1935–1951* and *Wildlife Abstracts 1952–1955,* available from the Bureau. *The Progressive Fish-Culturist,* a quarterly journal providing articles on fish husbandry, research and management, is for sale by the Superintendent of Documents.

Bird and Mammal Laboratories

U.S. Bureau of Sport Fisheries and Wildlife
U.S. National Museum
10th and Constitution Avenue NW.
Washington, D.C. 20560
Telephone: 381–5365 (Area code: 202)

The Bureau's small staff of mammalogists and ornitholigists, housed in the National Museum, maintain extensive collections and carry out studies on the taxonomy, distribution, and life history of birds and mammals. They provide free, authoritative information on North American birds and mammals and make identification of specimens or limited remains. The study collection is available for use by scientists.

Denver Wildlife Research Center

U.S. Bureau of Sport Fisheries and Wildlife
Building 45, Federal Center
Denver, Colo. 80225
Telephone: 233–3611 Extension 6626 (Area code: 303)

Studies in wildlife management and conservation are effected by biologists, physiologists, chemists, and engineers of the Denver Center, both in the laboratory and in the field. Some of the topics included in these studies are: Diseases and parasites of wildlife; propagation of rare and endangered wildlife; ecological relationships of wildlife to forests and rangelands; alleviation of damage to agriculture, forest, and range by birds, rodents, and predatory mammals; and the effects of insecticides and related chemicals on wildlife. The Center also answers technical questions of a limited nature and carries on service work in the identification of animal remains.

Patuxent Wildlife Research Center

U.S. Bureau of Sport Fisheries and Wildlife
Laurel, Md. 20810
Telephone: 474–6760 (Area code: 301)

Data collected and evaluated by the Center relates to wildlife management and conservation, including habitat requirements and development methods, life history, disease and parasites, control methods for nuisance and destructive animals, and toxicity of pesticides and their effect on growth and reproduction. The Migratory Bird Populations Station at the Center also conducts bird studies, maintaining banding records of all North American migratory birds and special published and unpublished data collections on the migration, distribution, and abundance of birds in North America and on the annual status of certain game species, such as waterfowl (ducks, geese, and swans), the mourning dove, woodcock, and Wilson's snipe.

The Center answers technical questions without charge. Data collected on migratory birds are available to organizations and individuals cooperating in the international bird-banding program sponsored by the Center. Literature searches are performed, and interlibrary loan services are provided.

Predator and Rodent Control Branch Reference Center

U.S. Bureau of Sport Fisheries and Wildlife
Short Course Building
New Jersey College of Agriculture
New Brunswick, N.J. 08903
Telephone: 247–1766 Extension 1333 (Area code: 201)

An information center on control products for animals and birds, the Reference Center compiles data from a survey of the published literature on such items as animal repellents and traps, rodenticides, and bird control equipment, including electrical, sound and light devices, chemical coatings, pyrotechnics, metal projectors or wires, protective nettings, and moving and whirling novelties. Holdings consist of books, journals, and reports in all major languages.

A list of manufacturers of animal control products and devices is published in the *Wildlife Leaflet* series, available on special request from the Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C., 20240. The Center also prepares special bibliographies on rats and house mice, fieldmice, moles, birds of economic importance, and animal acoustics. These are available without charge to pest control operators, county agricultural agents, and researchers.

NOTE: None of the laboratories listed below has an information bureau or a special section for handling inquiries. Staff members cannot take time to supply general information which is available at school or public libraries. However, questions about the work of a laboratory are welcomed by that laboratory and literature concerning accomplishments is available; in many instances information about other laboratories may also be obtained. Each laboratory has a library which is open to those seeking information in fishery science. Some, as indicated below, have specimen collections for study and identification purposes. Identification and diagnosis of fish disease is another service rendered within reasonable limits.

California-Nevada Sport Fishery Investigations

U.S. Bureau of Sport Fisheries and Wildlife
118 West 2d Street
Reno, Nev. 89501
Telephone: 322–9701 (Area code: 702)

This laboratory conducts studies to determine the physical quality of hatchery-reared trout by their ability to survive under various experimental conditions. It develops and tests methods of determining biological productivity of lakes and streams. Experimental introduction of trout food organisms into high-altitude lakes are made to determine if such measures are feasible for increasing the productivity of such waters.

Eastern Fish Disease Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Kearneysville, W. Va. 25430
Telephone: Charles Town 121R (Area code: 304)

Studies performed by the Laboratory include bacterial, virus, and parasite diseases; fish tissue culture; histology, histopathology and histochemistry of fishes; and diagnosis and treatment of fish diseases encountered in the East. Fish disease specimens are available for study.

Eastern Fish Nutrition Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Cortland, N.Y. 13045
Telephone: 756–2455 (Area code: 607)

Studies on nutritional requirements of trout and the development of suitable hatchery diets were initiated at the Laboratory under a cooperative agreement between the Federal Government, New York State, and Cornell University. The Laboratory's research program has been modified and objectives expanded to include studies on trout physiology and training of fish culturists.

Fish Control Laboratories

U.S. Bureau of Sport Fisheries and Wildlife
Post Office Box 862
La Crosse, Wis. 54602
Telephone: 4–9666 (Area code: 608)

U.S. Bureau of Sport Fisheries and Wildlife
Route 1, Box 52–A
Warm Springs, Ga. 31830
Telephone: 655–3573 (Area code: 404)

Research is conducted at these laboratories on chemicals which may be useful in the control of undesirable fish. Most of the research is separated into three basic types: preliminary screening for elimination of those chemicals which show undesirable or negative responses; delineative screening for further study of biologically active chemicals to determine effect of varying concentrations; and intensive screening for study of the effects of potentially useful chemicals on various fish species and at various life stages.

Fish Farming Experimental Station

U.S. Bureau of Sport Fisheries and Wildlife
Post Office Box 766
Stuttgart, Ark. 72160
Telephone: 922–6775 (Area code: 501)

Studies at the Station are concerned with the problems encountered in raising commercial-food fish, either as a primary crop on flooded lands or in rotation with rice and other field crops. Four catfishes (channel, blue, flathead, and white) and catfish hybrids, three buffalo fishes (black, bigmouth and smallmouth) and their hybrids, and the grass crop are being studied to determine those which have desirable qualities. Services of an extension biologist are available.

Fish Genetics Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Beulah, Wyo. 82712
Telephone: 643–2255 (Area code: 307)

This Laboratory is being planned. Facilities on the property recently acquired will be rehabilitated for some phases of research and for housing the personnel and equipment needed for a program of genetic research on selected species of game fish.

Fish-Pesticides Research Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Building 45, Federal Center
Denver, Colo. 80225
Telephone: 233–3611 Extension 8690 (Area code: 303)

Research on the effects of various pesticides is conducted at, and supervised by, the Laboratory in Denver, but research is also carried on at the National Fish Hatcheries in Jackson, Wyo., and Tishomingo, Okla., and at the Patuxent Wildlife Research Center in Maryland. The pesticides research program is being expanded to determine the relationship between fish, fish food, water, and pesticides in order to make possible the prediction of the effects of any planned chemical treatment.

North Central Reservoirs Investigations

U.S. Bureau of Sport Fisheries and Wildlife
Post Office Box 139
Yankton, S. Dak. 57078
Telephone: 667–9636 (Area code: 402)

This station conducts research on the sport fishery resources of Lewis and Clark Lake, Oahe Reservoir, and Fort Randall Reservoir, which are mainstem reservoirs on the Missouri River. Current studies include life histories, population dynamics, limnology, and the development and evaluation of fish sampling techniques. A reference collection of specimens is available for identification and study.

Salmon-Cultural Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
1440 Abernathy Road
Longview, Wash. 98632
Telephone: 425–6072 (Area code: 206)

The loss of much salmon habitat through the development of high dams has necessitated the development of artificial propagation to preserve certain important salmon resources along the west coast. The Salmon-Cultural Laboratory was established to determine facts which would make this new phase of hatchery operations most productive. Various diets and raceway types have been tried to learn their effects upon young salmon. Released salmon are marked to ascertain methods of propagation which result in the best survival as determined by the return of spawning adults.

Sandy Hook Marine Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Post Office Box 428
Highlands, N.J. 07732
Telephone: 872–0200 (Area code: 201)

This Laboratory conducts research on marine sport fishes, including life history of selected species, such as bluefish and red drum, relation of microorganisms to productivity of waters, effect of detergents and insecticides on estuarine organisms, distribution and numbers of important species, and effects of sea-surface temperatures upon the distribution and movement of coastal fishes. A reference collection of specimens is available for study and identification purposes.

South Central Reservoir Investigations

U.S. Bureau of Sport Fisheries and Wildlife
113 South East Street
Fayetteville, Ark. 72701
Telephone: 442–9292 (Area code: 501)

Basic research is conducted by this organization on the sport fishery resources of reservoirs in the White River Basin in Arkansas and Missouri. A significant feature of the research consists of the pre- and post-impoundment studies on Beaver Reservoir, which are being carried out under contract by the University of Arkansas. Studies are aimed at providing the best use of reservoir fishery resources and cover such problems as fish population, reservoir limnology, life histories of reservoir fishes, and management techniques which will permit the maximum production and harvest of the desirable species.

Southeastern Fish Cultural Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Marion, Ala. 36756
Telephone: 683–2161 (Area code: 205)

Certain of the facilities at the Marion National Fish Hatchery are used for research on better methods of propagating warm-water fishes. Studies include the use of hormones on fish spawning, effects of various diets on growth, characteristics of fish blood, desirability of hybrid catfish, and methods whereby the sex and sterility of propagated fish can be predetermined.

Tiburon Marine Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Post Office Box 98
Tiburon, Calif. 94920
Telephone: 435–4855 (Area code: 415)

This Laboratory conducts research on sport fishery resources of the Pacific coast. Sea-surface temperatures are obtained by a recently developed airborne instrument and are being correlated with the abundance and movement of game fishes. Life history studies and the effects of environmental changes on game fishes are made with SCUBA and a two-man submarine. Anglers are cooperating in a program of tagging marlin and sailfish to determine their movements and other life history data. A reference collection of specimens is available for identification and study.

Western Fish Disease Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Sand Point Naval Air Station, Building 204
Seattle, Wash. 98115
Telephone: 523–0550 Extension 508 (Area code: 206)

This laboratory conducts research on diseases of sport fishes in the West, with emphasis on diseases of anadromous species. Studies include bacterial, parasitic and virus diseases; histology and histopathology of fishes; and the diagnosis and treatment of diseases. Fish disease specimens are available for study.

Western Fish Nutrition Laboratory

U.S. Bureau of Sport Fisheries and Wildlife
Willard Laboratory
Star Route
Cook, Wash. 98615
Telephone: 538–8302 (Area code: 509)

This laboratory conducts research to determine the nutritional requirements of western salmonids, describe specific nutritional deficiences, ascertain the availability of nutrients in natural diets, and test the efficiency of different dietary formulas developed on the survival, growth, and return of salmon.

Geological Survey

U.S. Department of the Interior
18th and F Streets NW.
Washington, D.C. 20006
Telephone: 343–1100 (Area code: 202)

The Geological Survey has four scientific responsibilities: To conduct geologic surveys and investigations; to prepare and publish topographic maps; to collect, analyze, and interpret hydrologic and geologic data relating to water resources; and to classify public lands in regard to water storage, water power, and mineral value for conservation purposes. Areas of interest cover geology, geophysics, geochemistry, paleontology, paleobotany, ecology, biochemistry, economic geology, geomorphology, seismology, volcanology, mineralogy, petrology, crystallography, geochronology, oceanography, hydrology, water resources, hydraulics, water chemistry, sedimentation, limnology, cartography, geodesy, photogrammetry, geography, and water power.

Scientific information produced by the Geological Survey is made available to the general public primarily through publications.

Publications available for purchase from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, include professional papers; bulletins; water-supply papers; monographs; annual reports; geologic folios; *Geophysical Abstracts,* issued quarterly and providing abstract coverage from some 500 journals; and annual volumes, such as *Geological Survey Research,* a detailed summary of USGS programs, and the *Bibliography of North American Geology.* A complete list of formal literature prepared by the Geological Survey is found in *Publications of the Geological Survey,* issued every 5 years with annual supplements and available without charge from the Survey headquarters in Washington. Also available without charge are USGS circulars providing research project information and *Summaries of the Hawaiian Volcano Observatory,* issued quarterly and containing statistical data on volcanological and seismological observations.

Geologic maps, mineral resources maps and charts, hydrologic investigations atlases, topographic maps, and general or area maps and charts prepared by the Geological Survey are offered for sale. Over the counter sales are handled at the following Public Inquiry Offices:

U.S. Geological Survey
Room 602, Thomas Building
1314 Wood Street
Dallas, Tex. 75202

U.S. Geological Survey
468 New Custom House
Denver, Colo. 80202

U.S. Geological Survey
Room 8102, Federal Office Building
125 South State Street
Salt Lake City, Utah 84111

U.S. Geological Survey
504 Custom House
555 Battery Street
San Francisco, Calif. 94111

U.S. Geological Survey
1031 Bartlett Building
215 West Seventh Street
Los Angeles, Calif. 90014

U.S. Geological Survey
South 157 Howard Street
Spokane, Wash. 99204

U.S. Geological Survey
516 East Fifth Street
Anchorage, Alaska 99501

The Public Inquiry Offices are not equipped to handle mail orders for materials; their principal purpose is to provide convenient public contact points for information concerning the work of the Geological Survey and for publications and maps. Mail orders for maps and charts covering areas east of the Mississippi should be addressed to the U.S. Geological Survey at the Washington address. For area coverage west of the Mississippi, mail orders should be addressed to the U.S. Geological Survey, Denver Federal Center, Denver, Colo., 80225. Requests for maps of Alaska, originating in Alaska, may be addressed to U.S. Geological Survey, 310 First Avenue, Fairbanks, Alaska. Lists of available maps and charts will be found in *Publications of the Geological Survey.*

Unpublished data compiled during the course of Geological Survey research projects can often be obtained in advance of publication upon request to the Director, U.S. Geological Survey, in Washington, D.C.

These include stream-flow data, groundwater levels and artesian pressures data, suspended sediment data, water quality data, geodetic data, geodetic survey data, and topographic map manuscripts.

Main Library

U.S. Geological Survey
18th and F Streets NW.
Washington, D.C. 20006
Telephone: 343–3863 (Area code: 202)

U.S. Geological Survey Library
Denver Federal Center
Denver, Colo. 80225
Telephone: 233–3611 Extension 6733 (Area code: 303)

U.S. Geological Survey Library
345 Middlefield Road
Menlo Park, Calif. 94025
Telephone: 325–6761 Extension 208 or 209 (Area code: 415)

The Main Library of the Geological Survey is the largest of its type in the world, providing coverage in the fields of geology, water resources, and cartography and maintaining working collections in such related fields as soil science and inorganic chemistry. Holdings consist of books, journals, data, and a topographic and geologic map collection. The branch libraries in Denver and Menlo Park have holdings of books, journals, and reports in geology, mineralogy, and paleontology and a topographic map collection covering the United States. Each branch is supplied with copies of all major Geological Survey publications. In addition, the Denver library has a field record and photographic collection for geological expeditions from 1869 to the present. It also has a specialized collection of well logs.

The Main Library and its branches are open to the public for reference. The Denver library's collection of well logs is available only to Survey and Atomic Energy Commission personnel and its collection of field records is available to persons outside the Survey only by permission of the Director. A publications exchange program is maintained with approximately 500 foreign institutions. Interlibrary loan services are provided to other Government agencies, educational institutions, and industry. Photoduplication services are available at cost. Survey still photographs may be purchased from the Denver library or the Main Library in Washington. Prices vary depending upon size.

Publications from sources of the Main Library include *Bibliography of North American Geology, Bibliography of Geology Exclusive of North America,* and *Annotated Bibliography of Economic Geology,* all of which are issued annually. As a service to users, the Main Library distributes on request and without charge *The Geological Survey Guide and a General Outline of Classification.* The Denver library issues a *Selected Book List.*

Map Information Office

U.S. Geological Survey
18th and F Streets NW.
Washington, D.C. 20006
Telephone: 343–4401 (Area code: 202)

The Map Information Office is maintained by the Geological Survey as a Government-wide service to supply information on maps, aerial photography, and geodetic control surveys to Government agencies and the public. It handles over-the-counter sales of maps and aerial photographs for which the Geological Survey holds the negatives; provides graphic or tabular assembly of map, photographic, and geodetic controls for other Federal agencies; and distributes maps showing the current status of topographic mapping and aerial photography. It also serves as the central depository for maps which make up the *National Atlas of the United States* and issues descriptive lists of geographic features and selected maps published by the Geological Survey and other agencies. The lists are obtainable without charge from the Information Office.

Three western area offices of the Topographic Divisions provide similar services in their respective areas:

For the Pacific:
U.S. Geological Survey
Topographic Division Field Office
Menlo Park, Calif.

For the Rocky Mountain area and Alaska:
U.S. Geological Survey
Topographic Division Field Office
Denver, Colo.

For the Central area:
U.S. Geological Survey
Topographic Division Field Office
Rolla, Mo.

Public Information Office

U.S. Geological Survey
18th and F Streets NW.
Washington, D.C. 20242
Telephone: 343–4646 (Area code: 202)

Public information activities are a function of the Director's staff. This office prepares news releases, publications, features, and provides photographs and special reports on a variety of current scientific and technical subjects relating to the programs and interests of the Geological Survey.

Library

U.S. Department of the Interior
Room 1140, Interior Building
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 343–5815 (Area code: 202)

Serving the Department directly in the Washington area and providing secondary service to field stations, the Library acquires books, journals, and reports in all areas of conservation and the development of natural resources. Comprehensive coverage is provided in the following subject areas: water and power development, including saline water systems, properties of water and solutions, separation processes, interactions at boundaries of water systems, properties of salts, and brine and byproducts; mineral resources, including coal mining, preparation, utilization, and transportation, petroleum industry and trade, mining engineering and industry, mine health and safety, explosives technology, air and water pollution, mineral and fuels economics, metallurgy and minerals, and minerals technology; public land management, including cadastral engineering and surveying of forest resources, lands and land reserves studies, range resources, weed control, soil and water conservation, history of public lands, wilderness and recreational areas, national parks, archeology, natural history, and recreational demands and resources; and conservation of fish and wildlife resources, including fishery biology, ecology, genetics, taxonomy, parasitology, nutrition, pesticides, fish species, fishing industry and technology, control of animal population, mammals, waterfowl and other birds, environment, classification, diseases, injurious or nuisance plants, and animal predators.

The Library is open to the public for reference service and referrals are made to subject specialists within the Department. Interlibrary loans are made to other libraries, and a photoduplication service is available.

The semimonthly *Accessions List* issued by the Library includes accessions of the Geological Survey Library and the Office of Geography Library. It also announces reports and other publications issued by the Department and has a translations section which notes English abstracts and translations of relevant Russian, Chinese, and Japanese scientific materials, as well as Western European sources.

The Library's Foreign Documentation Service serves as a translation depository and clearinghouse for the Department. One copy of each translation produced is forwarded to the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20230, for inclusion in that agency's announcement bulletin, *Technical Translations.*

National Park Service

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 737–1820 Extension 4749 (Area code: 202)

The National Park Service conducts research intramurally with universities and research institutions in the fields of history, economics, archeology, biology, and geology. Historical research covers the interpretation of historical parks and the restoration and preservation of historic buildings, forts, and military posts. Economic research involves analysis of the probable impact upon the economics of surrounding communities arising from the proposed establishment of national areas. In the field of archeology, in addition to research in Service areas, salvage operations are carried out for archeological remains threatened with inundation by Federal and private water control projects. Biological research is directed toward the understanding and conservation of the fauna and flora of national park areas and includes projects in ecology, disease and insect control, fire control and tree husbandry, marine fishery studies, and natural history of wildlife. In the field of geology, research is conducted in glaciology, hydrology, and paleontology, hydrothermal studies, and geological mapping projects.

The Information Branch answers questions from the general public or refers inquiries to appropriate divisions of the Service for reply. Some publications of scientific content are offered for sale by the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. These include archeological research reports, natural history handbooks, and a tree preservation series.

Office of Coal Research

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 737–1820 Extension 5533 (Area code: 202)

The Office of Coal Research contracts and sponsors research and development designed to increase the value of the coal industry to the Nation's economy through better and more efficient methods of mining, preparation, and utilization of coal. Areas of interest cover increased tonnage output of mines; efficient, inexpensive methods of transporting coal to the consumer; new products from coal and associated materials, including refuse, chemicals, and minerals related to raw coal products; and the design and development of prototype devices and materials. Emphasis is on short-range applied research that promises immediate economic benefit.

Technical questions are answered without charge. Most contractors' research reports are offered for sale by the Office of Technical services, U.S. Department of Commerce, Washington, D.C., 20234, and are announced in that agency's semimonthly *U.S. Government Research Reports.*

Office of Geography

U.S. Department of the Interior
Washington, D.C. 20240
Telephone: 382–7275 (Area code: 202)

The Office of Geography provides research and staff services to the interdepartmental Board on Geographic Names in the field of foreign geographic nomenclature, conducts studies on nomenclature source materials for use in name standardization, performs research on individual foreign geographic names, and does research on type-classification of geographic features, the meaning of generic parts of names, and the definition of terms used to designate the features to which names are applied. It maintains extensive files of standard geographic names of foreign areas and responds to inquiries concerning such names. It also prepares systems for rendering names from non-Roman writing systems into the Roman alphabet.

Technical questions are answered free. Numerous gazetteers, compilations of official standard names approved by the Board on Geographic Names and the Secretary of the Interior, can be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402; others are available free from the Office of Geography. Also available without charge from the Office of Geography are transliteration systems for Arabic, Persian, Russian, Bulgarian, Thai, Greek, and Hebrew.

Office of Minerals and Solid Fuels

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 343–4776 (Area code: 202)

The Office provides advice and staff assistance to the Assistant Secretary for Mineral Resources and initiates specialized studies and evaluations as the basis for Departmental policy decisions affecting metals, minerals, and solid fuels. Primarily concerned with national preparedness plans and programs for metals, minerals, and solid fuels, the Office evaluates the productive capacity and availability of these materials from all sources, both domestic and foreign, and recommends appropriate action programs to overcome potential deficiencies. In evaluating the supply of these materials, the Office assembles and utilizes data provided by the Department's Bureau of Mines and Geological Survey and by other Government agencies.

The Office also provides advice and assistance for the Department on other Federal programs, including the stockpiling of strategic and critical materials, the disposal of surplus Government stockpile inventories, commodity export and import controls, and barter of surplus agricultural commodities for metals and minerals.

Limited requests for unclassified information, by telephone or mail, are handled free of charge. Referrals are made to other offices within the Department.

Office of Oil and Gas

U.S. Department of the Interior
18th and C Streets NW.
Washington, D.C. 20240
Telephone: 343–3831 (Area code: 202)

A focal point for petroleum and gas information in the Federal Government, the Office of Oil and Gas develops, evaluates, and coordinates information to provide sound basis for establishment and implementation of Government policies and programs for oil and gas; provides information and service to Government agencies with respect to strategic and economic factors affecting the petroleum and gas industries both in the United States and abroad; recommends programs and policies to improve the capabilities of these domestic industries; and provides advice with respect to international policies affecting petroleum and gas. The Office also prepares national emergency plans and develops preparedness programs to provide a state of readiness in petroleum and gas and provides representatives, advice, and assistance on petroleum and gas matters to U.S. delegations to international economic and defense organizations.

Questions, by telephone or mail, may be addressed to the Director, or to appropriate technical specialists. Reports produced by the Office consist of evaluations of resources of the United States and friendly foreign nations, providing information on which to base short-term and long-range petroleum and gas supply demand planning under peacetime, emergency, and wartime conditions. Most of these reports are made available only on a need-to-know basis.

Office of Saline Water

U.S. Department of the Interior
1107 16th Street NW.
Washington, D.C. 20242
Telephone: 382–3801 (Area code: 202)

The mission of the Office of Saline Water is to conduct and sponsor research and development of potentially economical processes for converting sea and brackish water to fresh water. Conversion processes studied include distillation processes using fossil or nuclear fuels; solar heat distillation; membrane processes; separation by freezing; and highly experimental techniques, such as solvent desalinization, liquid-liquid extraction, removal of ions with chelates, and the use of gas hydrates. Basic research in physics, chemistry, and biology is performed to develop ideas and data for new processes or to solve such problems as scale formation, heat transfer, and corrosion in order to improve existing processes. The Office also constructs and operates pilot and demonstration plants located throughout the United States.

Technical questions are answered. *Saline Water Conversion Report,* an annual account of the activities of the Office, is obtainable free on request. Research and development progress reports prepared in a numbered series by contractors are made available to the public by the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234.

U.S. DEPARTMENT OF THE TREASURY

Bureau of Customs

Division of Technical Services

Bureau of Customs
2100 K Street NW.
Washington, D.C. 20226
Telephone: 964–5853 (Area code: 202)

Field Laboratories:

103 South Gay Street
Baltimore, Md. 21202
Telephone: 752–8460 Extension 2592 (Area code: 301)

408 Atlantic Avenue
Boston, Mass. 02110
Telephone: 223–7709 (Area code: 617)

Customhouse
610 South Canal Street
Chicago, Ill. 60607
Telephone: 828–6128 (Area code: 312)

Customhouse
423 Canal Street
New Orleans, La. 70130
Telephone: 527–6311 (Area code: 504)

531 Mateo Street
Los Angeles, Calif. 90013
Telephone: 688–4747 (Area code: 213)

201 Varick Street
New York, N.Y. 10014
Telephone: 924–3000 Extension 538 (Area code: 212)

Custom House
La Marina
San Juan, Puerto Rico 00903
Telephone: 723–2780 Extension 32

Customhouse
Second and Chestnut Streets
Philadelphia, Pa. 19106
Telephone: 627-6000 Extension 6238 (Area code: 215)

630 Sansome Street, Room 1508
San Francisco, Calif. 94111
Telephone: 556-5437 (Area code: 415)

Customhouse
Bay and Bull Streets
Savannah, Ga. 31401
Telephone: 232-1423 (Area code: 912)

The Division of Technical Services furnishes technical information to customs officers, covering the analysis, sampling, weighing, and gaging of imported and exported merchandise. It also provides consultation services on probability sampling to the Bureau of Customs as a whole and conducts a program in analytical instrumentation. The work of the Division, most of which is devoted to analyzing samples of merchandise and raw material, is carried out by the 10 field laboratories located at principal ports.

Each of the laboratories analyzes a wide variety of products, including all imports subject to testing for which analyses are required. In addition to their all-purpose activities in the general field of analysis, the laboratories have certain specialties.

The Baltimore laboratory specializes in sampling procedures; the development of statistical methods; and the evaluation and testing of instruments used in analysis, such as the infrared technique to determine the origin of narcotic drugs. It also maintains a file of infrared spectrograms on punched cards. The New York laboratory specializes in X-ray diffraction studies and the testing of dyestuffs. It has special collections of data on dyestuffs and coal-tar intermediates and of commercial publications relating to chemistry and chemical analysis. The Boston laboratory performs probability sampling and testing of wool for clean content.

Information on methods of analysis and instrumentation is supplied to certain authorized non-Government organizations. Also, in cases of legitimate need, papers describing laboratory methods in use will be supplied gratis in limited quantities to individuals. Inquiries should be addressed to the Deputy Commissioner, Technical Services, Bureau of Customs, Washington, D.C., 20226.

The Division library in Washington has a collection of books, journals, and reports on ores and minerals; raw sugar; fertilizers; metals and metal products; wool; narcotics and seizures; textiles; petroleum and petroleum products; alcoholic products, including distilled spirits; coal tar dyes, lakes, and toners; and fixed and essential oils, including greases and waxes. There is also material on new sampling procedures and analytical chemistry. Material is made available to Government agencies and others upon approval. Testing services are provided on a limited basis to other Government agencies, but not to non-Government organizations.

The *U.S. Customs Laboratory Methods,* issued as a series and devoted to analyses of specific classes of items, is available to certain authorized agencies and individuals.

Bureau of Engraving and Printing

Office of Research and Development Engineering

14th and C Streets SW.
Washington, D.C. 20226
Telephone: 964-7211 (Area code: 202)

The Office of Research and Development Engineering is concerned with quality improvement of the products of the Bureau, reduction in cost, and with the development of new deterrents to the counterfeiting of U.S. securities. Research is conducted in spectrography, spectrophotometry, and microscopy. Chemical analyses and evaluation studies are made, and specifications are developed for paper, inks, pigments, oils, varnishes, adhesives, and machinery and electronic devices used in printing processes.

Ink formulas are secret, but general scientific technical, historical, and statistical questions relating to Bureau operations and not requiring special research are answered free.

Bureau of the Mint

15th Street and Pennsylvania Avenue NW.
Washington, D.C. 20220
Telephone: 964-2133 (Area code: 202)

The institutions of the Bureau of the Mint manufacture metallic money for Government account and have physical custody of the Treasury's stocks of monetary gold and silver. The mints in Denver and Philadelphia and the assay offices in New York City and San Francisco assay samples of bullion for gold and silver for the public, and the Denver Mint makes commercial assays of ores for gold, silver, lead, zinc, and copper; nominal charges are made for assay services.

Internal Revenue Service

National Office Laboratory

Alcohol and Tobacco Tax Division
12th Street and Constitution Avenue NW.
Washington, D.C. 20224
Telephone: 964–4201 (Area code: 202)

The National Office Laboratory of the Internal Revenue Service is responsible for the examination and testing of such commodities as distilled spirits and fermented alcoholic beverages; foods, flavors, and medicinal preparations using taxpaid spirits; tobacco and tobacco products; lubricating oils, food, and other products subject to excise tax under Internal Revenue regulations; toilet preparations, solvents, pharmaceuticals, and other articles made with specially denatured alcohols. Analytical work is also performed for the Bureau of Narcotics on narcotic drugs and marihuana; and for the District of Columbia Police Department on narcotic drugs, marihuana, and alcoholic beverages. In the area of physical instrument testing, the Laboratory tests and calibrates beer meters and thermometers; and evaluates locks, seals, and other security devices for the Internal Revenue Service. Examination is made of physical evidence for Treasury law enforcement officers, using conventional methods and radioactivation analysis. The Laboratory determines the age of distilled spirits by radioactive tritium dating. Assisted by 10 regional laboratories, the National Office Laboratory carries out research and develops testing procedures for the products and materials listed above and establishes specifications for denaturants and gaging equipment.

A library of some 3,500 reference books is maintained, covering fields of specialization. The Laboratory also acts in an advisory capacity on matters of a chemical nature.

While information and services are furnished primarily to Internal Revenue Service and other Treasury Department officials, it is the policy to cooperate with other Federal and State law enforcement officers when requested.

Reprints of published research papers originating in the Alcohol and Tobacco Tax Laboratories are available without charge, as are such manuals as: *Methods of Analysis for Alkaloids, Opiates, Marihuana, Barbiturates and Miscellaneous Drugs* and *Methods of Analysis for Tobacco and Tobacco Products.* The Laboratory also has a number of restricted publications available only to law enforcement officers.

U.S. Coast Guard

Office of Operations

U.S. Coast Guard
1300 E Street NW.
Washington, D.C. 20226
Telephone: 964–5211 (Area code: 202)

The U.S. Coast Guard performs research and collects data in the areas of oceanography and meteorology during its conduct of the International Ice Patrol, the ocean station program, selected Arctic cruises, and an observational program from offshore light stations. All programs collect meteorological data which is transmitted to the U.S. Weather Bureau. Investigation of currents affecting iceberg drift and iceberg deterioration are among the responsibilities of the International Ice Patrol. The ocean station and Arctic programs include physical, chemical, and biological oceanography. The offshore light-station program seeks data on waves, tides, currents, and thermal structure.

All oceanographic data are published in the CG–373 series, *Coast Guard Oceanographic Reports.* The narrative report of the Ice Patrol, including data on monthly ice conditions, iceberg sightings, and drift is published annually in the CG–188 series, *Report of the International Ice Patrol Service in the North Atlantic Ocean.* These publications are distributed free to interested research and educational institutions. Personal requests are handled on an individual basis.

Office of Engineering

U.S. Coast Guard
1300 E Street NW.
Washington, D.C. 20226
Telephone: 964–2868 (Area code: 202)

The Office of Engineering is made up of five divisions. The Testing and Development Division develops marine aids to navigation and search and rescue equipment and techniques for its application; it also conducts physical and environmental tests of all Coast Guard equipment with the exception of electronic apparatus. The Civil Engineering Division produces information on fog signal tests, atmospheric transmissivity, and lighted ranges and retroreflective materials, designs and constructs tall guyed towers for use as vertical electronic radiators, designs offshore structures of concrete and steel, and is concerned with other subjects related to the civil engineering work of the Coast Guard. The Naval Engineering Division designs, constructs, and maintains special-purpose ships and boats for search and rescue, buoy tending, icebreaking, oceanographic surveys, and ocean-station vessels and is responsible for other areas relating to the maintenance of the Coast Guard fleet. The functions of the Electronics Engineering Division include the design, development, testing, operation, and maintenance of electronic systems, including radio and microwave beacons, radio direction finders, underwater sound systems, fire-control systems, radar, and long-range electronic aids to navigation systems. The Aeronautical Engineering Division prepares specifications for fixed and rotary wing aircraft and develops special-purpose equipment to be used in aircraft to carry out the search and rescue missions of the Coast Guard.

Information produced by the Office of Engineering that concerns evaluations of commercial equipment and devices is restricted to Government agencies. Other information and publications are provided free to interested research and educational institutions and of official agencies of maritime countries; personal requests are handled on an individual basis.

Technical reports series available to authorized requesters are *Testing and Development Division Reports, Civil Engineering Reports,* issued with an annual index, and *Electronic Engineering Station Project Reports.* Also available on request is *The Engineer's Digest,* a quarterly news journal devoted largely to the maintenance and servicing of Coast Guard installations.

Ship Structure Committee
U.S. Coast Guard
1300 E Street NW.
Washington, D.C. 20226
Telephone: 964–5427 (Area code: 202)

The Ship Structure Committee, which includes members from other Government agencies, initiates and sponsors research for the improvement of hull structures in terms of materials, design, and fabrication. Areas of interest are fracture mechanisms, engineering fracture criteria, the development of improved steels, brittle fracture studies, studies of loads on ships, the analysis of ship structures, design criteria, weld flaw detection and evaluation, residual stress studies, studies of crack arrest, and the mechanical behavior of welds and weldments. All research is performed on contract by other Government agencies, universities, and industrial laboratories.

Information and publications are exchanged with shipbuilding and naval architectural societies in the United States and abroad. Materials and services are also available to any individual having a bona fide interest.

Publications of the Committee available on request are *Ship Structure Committee Reports,* a numbered report series, and *Index of Ship Structure Committee,* providing a complete list of report titles up to 1958. Photoreproductions of out-of-print SSC reports are made available by the Office of Technical Services, Department of Commerce, Washington, D.C., 20234, for a nominal charge.

U.S. NATIONAL COMMITTEE FOR INTERNATIONAL YEARS OF THE QUIET SUN, *See* NATIONAL ACADEMY OF SCIENCES–NATIONAL RESEARCH COUNCIL

U.S. NATIONAL COMMITTEE FOR THE INTERNATIONAL COUNCIL FOR BUILDING RESEARCH, STUDIES AND DOCUMENTATION, *See* NATIONAL ACADEMY OF SCIENCES–NATIONAL RESEARCH COUNCIL

U.S. NATIONAL COMMITTEE OF THE INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

Denver Federal Center
Post Office Box 15326
Denver, Colo. 80215
Telephone: 232–3611 (Area code: 303)

The Committee is a professional society which, primarily through its publications, disseminates information on irrigation and drainage, including flood prevention and control, irrigated agriculture, land classification, irrigation economics, drainage requirements, and design and operation of irrigation systems. Acquisitions include material in English, Russian, Italian, Spanish, French, and German.

Limited reference service is provided. Publications are distributed free to members and, if available, may be purchased by others. They include technical reports, the *Annual Bulletin,* the *Annual Report,* and the triennial *Transactions of International Congresses on Irrigation and Drainage.*

U.S. VETERANS ADMINISTRATION

Central Office Film Library

Veterans Administration Building
810 Vermont Avenue NW.
Washington, D.C. 20420
Telephone: 389–2715 (Area code: 202)

The Film Library collects medical, training, and vocational rehabilitation films produced by VA, other Government agencies, and commercial firms and organizations. Films produced by the Veterans Administration or by the Office of Education may be borrowed on request. All other films are restricted to Veterans Administration use. Films available for loan are listed in *Catalog of Films and Film Strips* (VA Catalog No. 6). Available medical films are also listed in *Film Reference Guide for Medicine and Allied Sciences* (VA Catalog No. 7), issued annually by the Interdepartment Committee on Medical Training Aids, of which the VA is a participating member. The *Film Reference Guide* may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Department of Data Management

Veterans Administration Building
810 Vermont Avenue
Washington, D.C. 20420
Telephone: 393–4120 (Area code: 202)

The Department applies data processing, data management, and process control techniques to support and improve VA operations. Data relating to three areas are processed: Government life insurance, compensation payment and pension awards, and medical research and diagnostic studies. Special studies have been made on the conversion of manual operations to automatic data processing procedures. Data processing information and services are available only to other Government agencies.

Medical and General Reference Library

Room 976, Veterans Administration Building
810 Vermont Avenue NW.
Washington, D.C. 20420
Telephone: 389–2678 (Area code: 202)

The Library serves as an information clearinghouse for the VA Central Office and for VA hospitals and regional offices. There are two collections of books, journals, and pamphlets. One includes publications on medicine, surgery, dentistry, pharmacy, rehabilitation, nursing, dietetics, social service, and paramedical areas, such as paraplegia, psychology, psychiatry, and hospital administration. The second collection pertains to personnel and public administration, accounting, insurance, statistics, electronic data processing, military history, and veterans' affairs.

Bibliographies are compiled and literature searches are made at the request of VA staff members. Microfilm and other photocopying services are also available only to the VA staff. The library is not open to the public but it will service other Government agencies.

A nationwide network of medical reference libraries is maintained by the Veterans Administration to serve the staff of each of its field hospitals. These libraries are not open to the public, but inquiries concerning the availability of specific services to the public may be addressed to the chief librarian of the individual VA hospital library. An interlibrary loan service is maintained with the Medical and General Reference Library. The field station libraries are located at the following addresses:

Veterans Administration Regional Office
Aronov Building
474 South Court Street
Montgomery, Ala. 36104

Veterans Administration Hospital
700 South 19th Street
Birmingham, Ala. 35233

Veterans Administration Hospital
Perry Hill Road
Montgomery, Ala. 36109

Veterans Administration Hospital
Tuscaloosa, Ala. 35404

Veterans Administration Hospital
Tuskegee, Ala. 36084

Veterans Administration Hospital
Seventh Street and Indian School Road
Phoenix, Ariz. 85012

Veterans Administration Hospital
Tucson, Ariz. 85713

Veterans Administration Center
Whipple, Ariz. 86301

Veterans Administration Hospital
Fayetteville, Ark. 72701

Veterans Administration Hospital
North Little Rock Division
300 East Roosevelt Road
Little Rock, Ark. 72206

Veterans Administration Regional Office
49 Fourth Street
San Francisco, Calif. 94103

Veterans Administration Hospital
2615 Clinton Avenue
Fresno, Calif. 93703

Veterans Administration Hospital
Livermore, Calif. 94551

Veterans Administration Hospital
5901 East Seventh Street
Long Beach, Calif. 90804

Veterans Administration Center
Sawtelle and Wilshire Boulevards
Los Angeles, Calif. 90025

Veterans Administration Hospital
Palo Alto, Calif. 94304

Veterans Administration Hospital
13000 Sayre Street
San Fernando, Calif. 91342

Veterans Administration Hospital
42nd Avenue and Clement Street
San Francisco, Calif. 94121

Veterans Administration Hospital
Sepulveda, Calif. 91343

Veterans Administration Hospital
1055 Clermont Street
Denver, Colo. 80220

Veterans Administration Hospital
Fort Lyon, Colo. 81038

Veterans Administration Hospital
Grand Junction, Colo. 81502

Veterans Administration Hospital
555 Willard Avenue
Newington, Conn. 06111

Veterans Administration Hospital
West Spring Street
West Haven, Conn. 06516

Veterans Administration Hospital
Wilmington, Del. 19805

Veterans Administration Hospital
2650 Wisconsin Avenue NW.
Washington, D.C. 20007

Veterans Administration Center
Bay Pines, Fla. 33504

Veterans Administration Hospital
Coral Gables, Fla. 33134

Veterans Administration Hospital
Lake City, Fla. 32055

Veterans Administration Regional Office
441–449 West Peachtree Street NE.
Atlanta, Ga. 30308

Veterans Administration Hospital
4158 Peachtree Road NE.
Atlanta, Ga. 30319

Veterans Administration Hospital
Augusta, Ga. 30904

Veterans Administration Center
Dublin, Ga. 31021

Veterans Administration Domicilliary
Thomasville, Ga. 31792

Veterans Administration Center
Fifth and Fort Streets
Boise, Idaho 83701

Veterans Administration Hospital
333 East Huron Street
Chicago, Ill. 60611

Veterans Administration Hospital
820 South Damen Avenue
Chicago, Ill. 60612

Veterans Administration Hospital
Danville, Ill. 61832

Veterans Administration Hospital
Downey, Ill. 60065

Veterans Administration Hospital
Dwight, Ill. 60420

Veterans Administration
Hines, Ill. 60141

Veterans Administration Hospital
Marion, Ill. 62959

Veterans Administration Hospital
1600 Randalia Drive
Fort Wayne, Ind. 46805

Veterans Administration Hospital
Tenth Street Division
1481 West 10th Street
Indianapolis, Ind. 46207

Veterans Administration Hospital
Cold Spring Road Division
1481 West 10th Street
Indianapolis, Ind. 46207

Veterans Administration Hospital
Marion, Ind. 46955

Veterans Administration Center
Des Moines, Iowa 50308

Veterans Administration Domicilliary
Clinton, Iowa 52732

Veterans Administration Hospital
Iowa City, Iowa 52241

Veterans Administration Hospital
Knoxville, Iowa 50138

Veterans Administration Center
5500 East Kellogg
Wichita, Kans. 67218

Veterans Administration Hospital
2200 Gage Boulevard
Topeka, Kans. 66622

Veterans Administration Hospital
Wadsworth, Kans. 66089

Veterans Administration Hospital
Lexington, Ky. 40507

Veterans Administration Hospital
Mellwood and Zorn Avenue
Louisville, Ky. 40202

Veterans Administration Center
510 East Stoner Avenue
Shreveport, La. 71101

Veterans Administration Hospital
Alexandria, La. 71301

Veterans Administration Hospital
1601 Perdido Street
New Orleans, La. 70140

Veterans Administration Center
Togus, Maine 04333

Veterans Administration Hospital
3900 Loch Raven Boulevard
Baltimore, Md. 21218

Veterans Administration Hospital
Fort Howard, Md. 21052

Veterans Administration Hospital
Perry Point, Md. 21902

Veterans Administration Outpatient Clinic
17 Court Street
Boston, Mass. 02108

Veterans Administration Hospital
200 Springs Road
Bedford, Mass. 01730

Veterans Administration Hospital
150 South Huntington Avenue
Boston, Mass. 02130

Veterans Administration Hospital
Brockton, Mass. 02401

Veterans Administration Hospital
Northampton, Mass. 01062

Veterans Administration Hospital
Rutland Heights, Mass. 01544

Veterans Administration Hospital
1400 Veterans of Foreign Wars Parkway
West Roxbury, Mass. 02132

Veterans Administration Hospital
2215 Fuller Road
Ann Arbor, Mich. 48105

Veterans Administration Hospital
Battle Creek, Mich. 49016

Veterans Administration Hospital
Dearborn, Mich. 48121

Veterans Administration Hospital
Iron Mountain, Mich. 49801

Veterans Administration Hospital
1500 Weiss Street
Saginaw, Mich. 48605

Veterans Administration Hospital
54th Street and 48th Avenue
South Minneapolis, Minn. 55417

Veterans Administration Hospital
St. Cloud, Minn. 56302

Veterans Administration Center
1500 East Woodrow Wilson Drive
Jackson, Miss. 39216

Veterans Administration Center
Biloxi Hospital and Domiciliary Division
Biloxi, Miss. 39531

Veterans Administration Center
Gulfport Division
Biloxi, Miss. 39531

Veterans Administration Hospital
Jefferson Barracks
St. Louis, Mo. 63125

Veterans Administration Hospital
4801 Linwood Boulevard
Kansas City, Mo. 64128

Veterans Administration Hospital
Poplar Bluff, Mo. 63901

Veterans Administration Hospital
915 North Grand Boulevard
St. Louis, Mo. 63106

Veterans Administration Center
Fort Harrison, Mont. 59636

Veterans Administration Hospital
Miles City, Mont. 59301

Veterans Administration Hospital
Grand Island, Nebra. 68801

Veterans Administration Hospital
600 South 70th Street
Lincoln, Nebra. 68501

Veterans Administration Hospital
4101 Woolworth Avenue
Omaha, Nebra. 68105

Veterans Administration Center
Reno, Nev. 89504

Veterans Administration Hospital
718 Smyth Road
Manchester, N. H. 03104

Veterans Administration Regional Office
20 Washington Place
Newark, N.J. 07102

Veterans Administration Hospital
East Orange, N.J. 07019

Veterans Administration Hospital
Lyons, N.J. 07939

Veterans Administration Hospital
2100 Ridgecrest Drive SE.
Albuquerque, N. Mex. 87101

Veterans Administration Hospital
Fort Bayard, N. Mex. 88036

Veterans Administration Regional Office
252 Seventh Avenue
New York, N.Y. 10001

Veterans Administration Hospital
Albany, N.Y. 12208

Veterans Administration Hospital
Batavia, N.Y. 14021

Veterans Administration Center
Bath, N.Y. 14810

Veterans Administration Hospital
130 West Kingsbridge Road
Bronx, N.Y. 10468

Veterans Administration Hospital
800 Poly Place
Brooklyn, N.Y. 11209

Veterans Administration Hospital
3495 Bailey Avenue
Buffalo, N.Y. 14215

Veterans Administration Hospital
Canadaigua, N.Y. 14424

Veterans Administration Hospital
Castle Point, N.Y. 12511

Veterans Administration Hospital
Montrose, N.Y. 10548

Veterans Administration Hospital
First Avenue at East 24th Street
New York, N.Y. 10010

Veterans Administration Hospital
Northport, Long Island, N.Y. 11768

Veterans Administration Hospital
Sunmount, Tupper Lake, N.Y. 12986

Veterans Administration Hospital
Irving Avenue and University Place
Syracuse, N.Y. 13210

Veterans Administration Hospital
Fulton Street and Erwin Road
Durham, N. C. 27705

Veterans Administration Hospital
Fayetteville, N.C. 28301

Veterans Administration Hospital
Oteen, N.C. 28805

Veterans Administration Hospital
Salisbury, N.C. 28144

Veterans Administration Center
Fargo, N.D. 58102

Veterans Administration Hospital
Broadview Heights Division
10000 Brecksville Road
Brecksville, Ohio 44141

Veterans Administration Hospital
Chillicothe, Ohio 45601

Veterans Administration Hospital
Cincinnati Division
3200 Vine Street
Cincinnati, Ohio 45220

Veterans Administration Hospital
7300 York Road
Cleveland, Ohio 44130

Veterans Administration Center
Dayton, Ohio 45428

Veterans Administration Hospital
Memorial Station
Honor Heights Drive
Muskogee, Okla. 74401

Veterans Administration Hospital
921 Northeast 13th Street
Oklahoma City, Okla. 73104

Veterans Administration Domiciliary
White City, Oreg. 97542

Veterans Administration Hospital
Sam Jackson Park
Portland, Oreg. 97207

Veterans Administration Hospital
Roseburg, Oreg. 97470

Veterans Administration Hospital
Altoona, Pa. 16603

Veterans Administration Hospital
Butler, Pa. 16001

Veterans Administration Hospital
Coatesville, Pa. 19320

Veterans Administration Hospital
135 East 38th Street Boulevard
Erie, Pa. 16504

Veterans Administration Hospital
Lebanon, Pa. 17042

Veterans Administration Center
Post Office Box 8079
5000 Wissahickon Avenue
Philadelphia, Pa. 19101

Veterans Administration Hospital
University and Woodland Avenues
Philadelphia, Pa. 19104

Veterans Administration Hospital
University Drive,
Pittsburgh, Pa. 15240

Veterans Administration Hospital
East End Boulevard
Wilkes-Barre, Pa. 18703

Veterans Administration Center
520 Ponce de Leon Avenue
San Juan, P.R. 00901

Veterans Administration Hospital
Davis Park, Providence, R.I. 02908

Veterans Administration Hospital
Columbia, S.C. 29201

Veterans Administration Center
Sioux Falls, S. Dak. 57101

Veterans Administration Hospital
Fort Meade, S. Dak. 57741

Veterans Administration Center
Hot Springs, S. Dak. 57747

Veterans Administration Hospital
Park Avenue and Getwell Street
Memphis, Tenn. 38115

Veterans Administration Hospital
Murfreesboro, Tenn. 37130

Veterans Administration Center
Mountain Home, Tenn. 37684

Veterans Administration Hospital
1310 24th Avenue,
South Nashville, Tenn. 37203

Veterans Administration Regional Office
511 North Akard Street
Dallas, Tex. 75201

Veterans Administration Regional Office
515 Rusk Avenue
Houston, Tex. 77061

Veterans Administration Hospital
Amarillo, Tex. 79106

Veterans Administration Hospital
Big Spring, Tex. 79721

Veterans Administration Center
Bonham, Tex. 75418

Veterans Administration Hospital
Kerrville, Tex. 78028

Veterans Administration Hospital
McKinney, Tex. 75069

Veterans Administration Hospital
Marlin, Tex. 76661

Veterans Administration Hospital
Temple, Tex. 76501

Veterans Administration Hospital
Memorial Drive
Waco, Tex. 76703

Veterans Administration Hospital
Salt Lake City, Utah 84113

Veterans Administration Center
White River Junction, Vt. 05001

Veterans Administration Center
Kecoughtan, Va. 23367

Veterans Administration Hospital
1201 Broad Rock Road
Richmond, Va. 23225

Veterans Administration Hospital
Salem, Va. 24153

Veterans Administration Hospital
American Lake, Wash. 98493

Veterans Administration Hospital
4435 Beacon Avenue
South Seattle, Wash. 98108

Veterans Administration Hospital
North 4815 Assembly Street
Spokane, Wash. 99208

Veterans Administration Hospital
Vancouver, Wash. 98663

Veterans Administration Hospital
Walla Walla, Wash. 99362

Veterans Administration Hospital
200 Veterans Avenue
Beckley, W. Va. 25801

Veterans Administration Hospital
Clarksburg, W. Va. 26302

Veterans Administration Hospital
1540 Spring Valley Drive
Huntington, W. Va. 25701

Veterans Administration Center
Martinsburg, W. Va. 25401

Veterans Administration Hospital
2500 Overlook Terrace
Madison, Wis. 53705

Veterans Administration Regional Office
342 North Water Street
Milwaukee, Wis. 53202

Veterans Administration Hospital
Tomah, Wis. 54660

Veterans Administration Center
Wood, Wis. 53193

Veterans Administration Center
2360 East Pershing Boulevard
Cheyenne, Wyo. 82001

Veterans Administration Hospital
Sheridan, Wyo. 82801

The following publications are issued by and are available from the VA Medical and General Reference Library: *Traumatic Paraplegia,* an annual selected bibliography; *Bibliography of Management Publications; Basic List of Books and Periodicals for Veterans Administration Medical Libraries: Medical Care of the Veteran in the United States, 1870–1960, a Bibliography;* and a monthly *Acquisition List.*

Medical Illustration Service

Veterans Administration Hospital
Park Avenue and Getwell Street
Memphis, Tenn. 38115
Telephone: 452–7381 Extension 543 (Area code: 901)

As an adjunct to the lantern and film slide library of the VA hospital in Memphis, the Medical Illustration Service prepares slides arranged in sets for purposes of medical diagnosis. The slide study sets are available for loan on request. No catalog is issued. Consultation services are offered on biological and medical photographic problems. Specific questions relating to medical illustration are answered. There is no charge for these services.

Medical Illustration Staff

Veterans Administration Building
810 Vermont Avenue NW.
Washington, D.C. 20420
Telephone: 393–1420 Extensions 2215 and 2313 (Area code: 202)

The Medical Illustration Staff of the Department of Medicine and Surgery coordinates the presentation of exhibits for medical and scientific meetings; films produced by the Army, Navy, Air Force and commercial producers are selected and purchased for intra-VA use. The Medical Illustration Staff is a member of the Federal Advisory Council on Medical Training Aids.

Requests for the presentation of Veterans Administration exhibits must be individually negotiated. Factors for consideration include the suitability of an exhibit to a proposed meeting group and such costs as shipping labor for installation and dismantling.

Prosthetic and Sensory Aids Service

Veterans Administration
Research and Development Division
252 Seventh Avenue
New York, N.Y. 10001
Telephone: 924–5000 Extensions 671 and 672 (Area code: 212)

The Service is responsible for the Veterans Administration program of research and development as well as clinical services in the broad areas of prosthetic and sensory aids. Intramural and contractual investigations are conducted on artificial limbs, orthopedic braces, reading machines and guidance devices for the blind, wheel chairs, lifting devices, and other related appliances allowing seriously disabled individuals to acquire greater independence.

A Prosthetics Center, maintained by the Service in New York, conducts research on artificial limbs and braces, develops standards and specifications, and conducts compliance tests. Bioengineering evaluations are performed as part of the Center's activities in addition to its research and development programs. The VA Prosthetics Center also is responsible for the fabricating and fitting of artificial limbs and braces, not only for veteran beneficiaries in the New York area who elect to use such service, but for serious problem cases referred to the Center by other VA facilities.

A network of orthopedic shops and plastic eye and restoration clinics is operated by the Service in localities where commercial facilities are either limited or unsatisfactory. Clinical application studies are conducted through orthopedic and prosthetic appliance clinic teams in major cities.

The Prosthetic and Sensory Aids Service compiles and correlates research data, reports, and published information and collects slides, films, patents, photographs, and microfilms relating to prosthetic and sensory aids. Languages represented include English, Italian, French, German, Swedish, Danish, and Russian. Translating services are not routinely provided. A permanent Prosthetics Reference Exhibit is maintained, consisting of over 1,000 artificial limb components, braces, cosmetic restorations, hearing aids, aids for the blind, crutches, wheel chairs, and related items. The exhibit illustrates the development of prosthetic appliances from 300 B.C. to the present.

A Prosthetics Reference Collection is available for direct use. Requests by responsible investigators for technical information may be sent by mail, bibliographies are compiled or revised from time to time on subjects such as artificial limbs and braces and sensory aids for the blind, and literature searches are undertaken when appropriate. There is no charge for these services. Selected reprints and limited numbers of research reports are disseminated free on request. Technical prosthetics films may be borrowed without charge. Specialized mailing lists are maintained.

The Prosthetic and Sensory Aids Service *Bulletin of Prosthetics Research,* a VA semiannual publication, is distributed free to interested individuals and organizations.

VA Cancer Registry

Veterans Administration Building
810 Vermont Avenue NW.
Washington, D.C. 20420
Telephone: 389–2315 (Area code: 202)

The Cancer Registry is a clinical and research tool for the Veterans Administration. All VA hospitals register their cancer cases, although a small number register only a sample of 20 percent of their cases. Specific neoplastic diseases with up-to-date clinical and histopathologic data are identified and cataloged in a ready-reference form for use in research or educational projects. Subject coverage includes cancer morbidity and mortality among veterans, statistics, neoplasms, clinical data, histopathologic data, rare neoplastic diseases, cancer treatment results, and disease processes. Data summaries and statistics are developed.

Application must be submitted for use of the Cancer Registry for research and educational purposes.

UNIVERSAL OIL PRODUCTS CO.

Research Library

30 Algonquin Road
Des Plaines, Ill. 60018
Telephone: 763–6000 (Area code: 312)

The Library provides coverage in petroleum refining and engineering, petrochemicals, organic and inorganic chemistry, analytical chemistry, catalyst research, instrumentation, physics, and specialty products, such as food additives and petroleum product additives. Source materials are in English, Russian, Italian, Spanish, French, and German.

Questions from Company personnel and representatives of certain nonprofit organizations are answered, and cooperation extended to authorized libraries on an interlibrary loan basis.

UNIVERSITY OF ALASKA

Alaska Agricultural Experiment Station

University of Alaska
Post Office Box E
Palmer, Alaska
Telephone: 745–3110 (Area code: 907)

The Station maintains a library on agriculture, with emphasis on circumpolar aspects and problems. The collection is available for on-site use, and reference and consulting services are provided without charge. Results of studies undertaken by the Station are published in the form of technical reports.

World Data Center A: Aurora (Instrumental)

Geophysical Institute of the University of Alaska
College, Alaska
Telephone: 479–2261 (Area code: 907)

The Center constitutes an international archive for auroral scientific data. The collection consists of all-sky camera data, recorded on 16- or 35-mm film; and riometer data, consisting of records obtained by Alaskan stations of 27.6 mc. cosmic noise. Copies are provided to the scientific community at cost. A catalog of data received is issued every 6 months and is available free on request.

UNIVERSITY OF ARIZONA

Arizona Bureau of Mines

University of Arizona
College of Mines
Tucson, Ariz. 85717
Telephone: 624–8181 Extension 501 (Area code: 602)

The Bureau functions as a research and special service unit within the College of Mines and provides information concerning the nature and distribution of the mineral resources of Arizona. Its objectives are to make scientific investigations in the fields of mining, geology, metallurgy, and petroleum and to disseminate knowledge which may lead to the development and expansion of the State's mineral industries. The Bureau maintains a pilot plant for mineral dressing research and effects continuing liaison with mineral industry operations in Arizona.

Free mineral identification of rock specimens found in Arizona is provided by the Bureau, which also maintains a repository for cataloging deep petroleum and water wells drilled in the State and the statistical records of Arizona's mineral production. Interlibrary loan of journals, data, and other material in the collection may be arranged.

Technical bulletins issued by the Bureau on mineral occurrences and mining enterprises are free to Arizona residents and for sale to others. Comprehensive geologic and mineral resource maps of the State may also be purchased.

Reference and consulting services are available. The collection is accessible for on-site reference.

Arizona Cooperative Wildlife Research Unit

University of Arizona
Biological Sciences Building, Room 214
Tucson, Ariz. 85717
Telephone: 624–8181 Extension 322 (Area code: 602)

This research and training program in fisheries and wildlife management is sponsored by the University, the Arizona Game and Fish Department, the U.S. Fish and Wildlife Service, and the Wildlife Management Institute. A library is maintained, containing books, journals, and reports concerning general conservation, wildlife management, mammals, birds, reptiles and amphibians, fish, fisheries management, ecology, hunting and fishing, wildlife and fisheries research, forestry, watershed management, wildlife economics, and range management. English, Russian, Spanish, German, and Finnish sources are represented.

Information activities include reference and consulting services. The library is open to the public for on-site use without restrictions.

Bureau of Ethnic Research

University of Arizona
Department of Anthropology
Tucson, Ariz. 85717
Telephone: 624–8181 Extension 306 (Area code: 602)

A part of the Department of Anthropology, the Bureau is an information and research center devoted to the study of modern Indian life and Indian affairs, including demography, research on current problems related to Indian administration, applied anthropological research in the Southwestern United States, and practical problems related to Indian adjustment to non-Indian institutions.

Institute of Atmospheric Physics

University of Arizona
Tucson, Ariz. 85717
Telephone: 624–8181 (Area code: 602)

The Institute conducts research on all aspects of the fundamental mechanisms governing weather processes. It places particular emphasis on basic investigations of atmospheric conditions which affect cloud and precipitation processes and evaporation from the surface. Its collection of reports, data, and nonprinted material may be consulted on the premises. Subjects covered are regional climatology, cloud physics, saline water demineralization, cloud modification, micrometeorology, and dynamic meteorology. Language input is English, Chinese, Japanese, Italian, Spanish, French, and German. Technical questions are answered by staff members as time permits.

The Solar Energy Research Laboratory, a 1,600-square-foot building, fully heated by solar energy and cooled by reversing the system at night to cool water by radiation to the night sky, is a part of the Institute.

Laboratory of Tree Ring Research

University of Arizona
Tucson, Ariz. 85717
Telephone: 624–8181 Extension 807 (Area code: 602)

Sponsored by Federal, State, and private institutions, the Laboratory conducts studies in tree growth and climate, the development of millenia-long tree-ring chronologies, and the application of tree-ring dates to prehistoric events, particularly in archeology. The age of plants and any structure or event with which they were associated while living or after they had been cut or died is determined. Past climates are interpreted, with particular references to trends which might be repeated in the future. Approximately 100,000 prehistoric tree-ring specimens, mostly from the Southwest, are housed in the Laboratory. Approximately 15,000 specimens from living or recently dead trees from the western part of the United States, as well as from Canada, Alaska, and Mexico, are also available for study. Included in the latter group are samples from sequoias up to 3,200 years old and bristlecone pines up to 4,600 years old.

A library, maintained primarily for staff members and students, is accessible for use by the public. A consulting service is available on a fee basis.

The quarterly *Tree Ring Bulletin* is available with annual membership in the Tree Ring Society or by purchase.

Library

University of Arizona
Park Avenue and 3d Street
Tucson, Ariz. 85719
Telephone: 624–8181 Extension 591 (Area code: 602)

There are more than 450,000 cataloged books in the collection, nearly 60,000 maps, 48,000 titles on microfilm or microcards, and extensive holdings of bound journals. As a regional depository for publications issued by the U.S. Government, the Library also has some 400,000 Government documents. These resources support the University's programs of instruction and research in anthropology, agriculture, botany, chemistry, mathematics, zoology, psychology, mining, and engineering.

Most of the collection is available for home use by University personnel and by others with specialized needs. Periodicals are noncirculating. Interlibrary loan requests for periodicals will be filled by photocopy in lieu of loan.

UNIVERSITY OF CALIFORNIA

Institute of Transportation and Traffic Engineering

1301 South 46th Street
Richmond, Calif. 94804
Telephone: 235-6000 Extension 239 (Area code: 415)

The Institute maintains a library of books, journals, reports, films, and data relating to highway and air transportation, mass transit, city and regional planning, airport and highway engineering, traffic engineering, soil mechanics, bituminous materials, trucking, and urban transportation. English, Italian, Spanish, French, Scandinavian, and German sources are represented.

Technical questions are answered without charge, but extensive literature searches are limited to staff members. Only interlibrary loans are made.

Lawrence Radiation Laboratory

University of California
Box 808
Livermore, Calif. 94551
Telephone: 447-1100 Extension 8381 (Area code: 415)

The Laboratory's Scientific Information Systems Group provides information on neutron cross sections, neutron differential cross sections, and gamma ray cross sections. Journals, reports, and data in all major languages are evaluated and analyzed. Group publications consist of technical reports, state-of-the-art reviews, and data handbooks. Consulting and reference services are available without restrictions, but the Group reserves the right to establish priorities and to refuse trivial requests.

Lick Observatory

Mount Hamilton, Calif. 95140
Telephone: 258-5061 (Area code: 408)

The Observatory maintains the Double Star Catalogue, consisting of a punched-card index of individual measures of double stars of the northern hemisphere from 1932 to date. Individual measures on microfilm and punched cards of double stars from −20° declination from the earliest records up to 1957 are also available. Services are provided to members of the scientific and technical community. No charge is made for short lists of double star measures; for more extensive searches, fees are determined on the basis of card handling and machine time required.

The Lick Observatory library provides extensive coverage in all areas of astronomy and astrophysics. The books, journals, and reports in the collection include sources in Chinese, Russian, Japanese, Italian, Spanish, French, German, and Polish. Materials are available for on-site use; interlibrary loans are made.

University of California, Berkeley

American Committee on Arthropod-borne Viruses

School of Public Health
University of California
Berkeley, Calif. 94704
Telephone: 845-6000 Extension 4027 (Area code: 415)

The American Committee on Arthropod-borne Viruses conducts an exchange of information among investigators actively engaged in research on this category of viruses. This information is embodied in the *Arthropod-borne Virus Information Exchange* and in a *Catalogue of Arthropod-borne Viruses.*

The Arthropod-borne Virus Information Exchange, distributed free to active research workers, is issued for the purpose of exchange of information among investigators in this field. It contains reports, summaries, observations, and comments submitted voluntarily by qualified agencies and investigators. The appearance of any information, data, opinions, or views in it does not constitute formal publication. Any reference to or quotation of any part of the *Exchange* must be authorized directly by the person or agency which submitted the text.

The distribution of the *Catalogue* for the purpose of general reference in publications is restricted; neither may it be used without the explicit consent of the person making the registration as a source of reference to a virus that has not been described in a formal publication.

Computer Center
University of California
Berkeley, Calif. 94704
Telephone: 845–6000 Extension 2093 (Area code: 415)

The Center's library has a small collection of books related to computer processing, programing, and equipment and subscribes to journals in the field. It maintains, reproduces, and distributes documentation and indexes of computer programs generated locally or obtained from other sources, primarily other universities.

The Center also prepares *Project Abstracts* of student and faculty research, in various fields, which involves computer processing. After initial free distribution, the *Abstracts* are available for on-site reference or loan. In addition, the Center issues a semimonthly *Newsletter,* which details current programing activity and equipment changes.

General Library
University of California
Berkeley, Calif. 94704
Telephone: 845–6000 (Area code: 415)

The General Library and its branch libraries on the Berkeley compus provide all-inclusive subject coverage. Major subject areas are agriculture, architecture, art, anthropology, western American history, biochemistry, biology, chemistry, city planning and regional planning, earth sciences, education, psychology, engineering, entomology, forestry, landscape architecture, library science, music, optometry, physics, public health, social sciences, astronomy, mathematics, statistics, and forest products. Its East Asiatic collection contains materials in all subjects in the oriental languages. In addition to world literature, totaling nearly 3 million volumes, and nonprinted material in these fields, the Library has a comprehensive Government documents section.

The collections are accessible for use to the University community, to faculty of all institutions of higher learning in California, and for a fee to other users. Availability of material for direct loan depends upon the qualifications of the requester and the kind of material asked for. Interlibrary loans are provided.

Insect Diagnostic Service
Division of Invertebrate Pathology
207 Agriculture Hall
University of California
Berkeley, Calif. 94704
Telephone: 845–6000 Extension 2957 (Area code: 415)

Dead and diseased insects are accepted by the Service for diagnosis of infectious diseases of insects and related invertebrates. Services are provided free to anyone, and diagnostic results are reported in detail to the person submitting the specimen. A diagnostic index is maintained to all diseases and abnormalities found in insects. Technical questions are answered, and scientific data or data compilations are provided on request. Those desiring to submit specimens are asked to obtain a copy of a pamphlet entitled *Instructions for Submitting Specimens.*

Water Resources Center Archives
University of California
Berkeley, Calif. 94704
Telephone: 845–6000 Extension 2666 (Area code: 415)

The Archives provides a working collection with emphasis on unpublished, original source materials on water as a natural resource and its utilization, irrigation, flood control, municipal and industrial water uses and problems, water rights, and water development projects. Holdings deal primarily with the western United States. A regional index of sources is available.

The collection is accessible for direct use by approved visitors. Literature searches are performed, and state-of-the-art reviews, correlations of information, and special bibliographies are prepared. Materials may be borrowed only if there are duplicate copies. Photocopying is possible through arrangement with the University.

University of California, Davis

University Library
University of California
Davis, Calif. 95616
Telephone: 753–4011 Extension 2167 (Area code: 916)

The University Library on the Davis campus has a collection on veterinary medicine, the natural sciences, and agriculture, with specialization in the biological sciences, California agriculture, irrigation, animal husbandry, horticulture, oenology, apiculture, food sciences, agricultural economics, and history of agricultural engineering and technology. Sources in Chinese, Russian, Japanese, Italian, Spanish, French, and German are represented.

The public is permitted on-site use of the material. Reference and document services are provided primarily to students, faculty, and research personnel attached to the campus. Interlibrary loans are available.

University of California, Los Angeles

The resources of the UCLA libraries are generally available to organizations and individuals not connected with the University of California. Persons residing in the Los Angeles metropolitan area, which includes Los Angeles, Ventura, and Orange Counties, may obtain direct borrowing privileges valid for 6 months or 1 year upon payment of a fee. Visiting readers from outside this area may obtain permission for on-site reference use without charge.

Biomedical Library

University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024
Telephone: 272-8911 Extension 2166 (Area code: 213)

Subject coverage is provided in the basic medical sciences, including public health, nursing, botany, zoology, microbiology, dentistry, and the history of medicine. The collection of books, journals, reports, and films and photos is available to the public for reference use. Literature in Russian, Italian, Spanish, French, and German is included.

Chemistry Research Library

University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024
Telephone: 272-8911 Extension 2822 (Area code: 213)

The Library's collection of books, journals, reports patents, and films and photos covers all phases of chemical literature, including organic, inorganic, analytical, nuclear, polymer, radiation, physical, and electrochemistry, biochemistry, thermodynamics, quantum mechanics, toxicology, and crystallography. All major languages are represented. There is a special collection on the history of chemistry. Holdings also include Sadtler standard spectra sheets, U.S. chemical patents on microcards, documentation of molecular spectroscopy on spectral cards and on tape, abstract cards prepared by the Gas Chromatography Abstract Service, translations of major Russian chemical journals, and a bound collection of all University chemistry departmental theses.

Engineering and Mathematical Sciences Library

University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024
Telephone: 272-8911 Extension 3820 (Area code: 213)

Holdings cover astronomy, mathematics, meteorology, and engineering, especially electrical, electronic, space aeronautics, computer, mechanical, and chemical. Literature in all major languages is represented. The library is a depository for translations distributed by the Office of Technical Services, U.S. Department of Commerce, and reports issued by the National Aeronautics and Space Administration and the Rand Corporation. There are special collections of scientific and technical conference proceedings and International Geophysical Year data on microcards.

Geology-Geophysics Library

University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024
Telephone: 272-8911 Extension 2773 (Area code: 213)

The collection includes books, journals, films and photos, data, and maps and charts pertaining to geology, geophysics, geochemistry, space science, and planetary physics. Foreign source materials are in Russian, Italian, Spanish, French, and German.

Map Library

University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024
Telephone: 272-8911 Extension 2279. (Area code: 213)

Areas emphasized in the collection are the Pacific Ocean and islands, Africa, and Latin America. Holdings include city plans of most urban centers in all countries of the world and map indexes and sales catalogs prepared by official and private mapping agencies abroad.

Neuropsychiatric Institute

University of California
760 Westwood Plaza
Los Angeles, Calif. 90024
Telephone: 478-0201 or 879-0201 Extension 244. (Area code: 213)

The Institute is sponsored by the Department of Mental Hygiene of the State of California and is located at the UCLA Center for the Health Sciences. It maintains a Professional Staff Library pertaining to psychiatry, psychoanalysis, clinical psychology, psychotherapy, hospital administration, including nursing and personnel, behavioral and social sciences, psychiatric nursing and social work, rehabilitation, and semantics. The Library is essentially a functional working collection of basic texts, monographs, journals, and current publications of specific use to the work of the Institute's professional staff.

Numerical Analysis Research Library

University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024
Telephone: 272–8911 Extension 213 (Area code: 213)

The Library has a collection of books, journals, and reports in the fields of pure and applied mathematics, numerical analysis, mathematical tables, and automatic digital computing machinery.

Physics Library

University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024
Telephone: 272–8911 Extension 2747 (Area code: 213)

Subject coverage extends to all areas of physics and mathematics. The books, journals, and reports in the collection are available for on-site reference. Foreign sources include Russian, Italian, Spanish, French, and German.

University of California, Riverside

University Library

University of California
Eighth Street
Riverside, Calif. 92502
Telephone: 684–2210 (Area code: 714)

The University Library at Riverside has a collection of journals, books, and other materials on arid land ecology, particularly as related to the Southwestern United States and including flora, fauna, agriculture, geography, subtropical horticulture, entomology, and air pollution. English, Russian, Italian, Spanish, French, and German sources are included.

Access to the Library is granted to the public for on-site use. Reference and document services are furnished primarily to the students and faculty. Interlibrary loans are made.

University of California, San Diego

Scripps Institution of Oceanography

University of California
8602 La Jolla Shores Drive
La Jolla, Calif. 92037
Telephone: 459–2388 (Area code: 714)

The Scripps Institution maintains a library of books, journals, and reports on oceanography and marine biology in support of its research activities. Sources in English, Chinese, Russian, Japanese, Italian, Spanish, French, and German are acquired. The collection is accessible for on-site use. Reference and document services are provided primarily for students and faculty of the San Diego Campus. Photocopying is done at cost, and interlibrary loans are made.

In addition to literature in the field, the Scripps Institution also has the following specialized specimen collections: the Marine Geological Collection, consisting of sediment samples and dredged rocks from the ocean floor, particularly the Pacific; the Marine Vertebrate Collection of pelagic and bathypelagic fishes from the world's oceans and shore fishes, primarily of California and the eastern tropical Pacific; the Marine Invertebrate Collection, consisting of net zooplankton, and dredged and intertidal specimens.

Specimens and data are available on loan or, under some circumstances, as a gift to any recognized scientist or research institution. Consulting services are provided.

Other information activities at the Scripps Institution of Oceanography are the Bathythermograph (BT) Data Processing and Analysis Facility and the Data Collecting and Processing Group. The former processes and archives BT temperature data of the Pacific and Indian Oceans from 1941 to date, surface temperature observations collected at shore stations on the west coast of North America from 1916 to date, and tide records for the Scripps Pier at La Jolla, California, from 1924 to date. This Facility also archives published hydrographic station data, such as temperature, salinity, and chemical determinations for the Pacific Ocean.

The Data Collecting and Processing Group acquires, evaluates, and generates physical and chemical oceanographic data, with emphasis on the northeastern Pacific. A file on more than 15,000 oceanographic stations is maintained in graphical form.

Both facilities make data available without charge to Federal and State Government agencies and to oceanography departments or laboratories of educational and research institutions.

UNIVERSITY OF COLORADO

Biological Sciences Curriculum Study

Mail:
P.O. Box 930
Boulder, Colo. 80301

Location:
University of Colorado Campus
McKenna Hall
Boulder, Colo.
Telephone: 443–2211 Extension 6453 (Area code: 304)

Sponsored primarily by the National Science Foundation, the Biological Sciences Curriculum Study receives funds from other Government agencies and private foundations. Concerned with the improvement of biological education at all levels, it has been concentrating chiefly on the secondary school biology curriculum and has produced high school biology textbooks, research projects, laboratory materials, films, and teachers' aids. It is currently working on a second course in biology, a course for slow learners, a course at the junior high school level, teacher preparation, and similar activities relative to biological education. International activities are carried out through support of the Rockefeller Foundation, the Asia Foundation, AID, and other agencies. Additional information is available upon request. The *BSCS Newsletter* is sent free to interested persons.

Engineering Research Center

University of Colorado Campus
Boulder, Colo. 80304
Telephone: 443–2211 Extension 7427 (Area code: 304)

Sponsored by Federal and State agencies, the Center is engaged in research on microwaves, lasers and masers, vacuum tube technology, flow meter calibration, stress and strain of materials, transportation, soil mechanics, thermal properties at cryogenic temperatures, reaction kinetics, heat and mass transfer, photodecomposition of water, digital and analog computer utilization, and polymers. Availability of research results is subject to approval by the sponsor.

Institute of Arctic and Alpine Research

University of Colorado
Hale Science Building
Boulder, Colo. 80304
Telephone: 443–2211 Extension 6607 (Area code: 303)

Field Headquarters
Institute of Arctic and Alpine Research
Science Lodge Mountain Research Station
Nederland, Colo.

The Institute conducts research in mountain and northern regions, operates a program of education and training in techniques of year round travel and living in mountains, and cooperates with investigators whose activities can be helped by its facilities and experience. Books, journals, and reports on mountain ecology, climatology, botany, zoology, geomorphology, radiation ecology, watershed management, and taxonomy are acquired for the Institute's library. Language sources are English, Russian, Spanish, French, and German. Reference service is provided without charge.

Joint Institute for Laboratory Astrophysics

Mail:
University of Colorado
Boulder, Colo. 80304

Location:
University of Colorado Campus
Boulder, Colo.
Telephone: 443–2211 Extension 7361 (Area code: 304)

The Joint Institute is an advanced training and research group established by the University of Colorado and the National Bureau of Standards to carry out, in cooperation with the University's departments of physics and astrophysics and aerospace engineering sciences, experimental and theoretical studies of gaseous material under conditions duplicating the astrophysical environment. Areas of specialization include determination of all microscopic interaction coefficients of gases under these configurations and their application to the determination of the state of the gas in this environment, with stress on problems on radiative affects.

The Data Center of JILA has compiled a bibliography of low-energy electron collision cross section data, issued as *JILA Report No. 4,* which will be revised and reissued annually. The Data Center has on file copies of all formally published reports of data listed in the bibliography, as well as a number of preprints not listed. A *JILA Report* giving electron collision cross section ionization data will be available in 1964.

Libraries

University of Colorado Campus
Boulder, Colo 80304
Telephone: 443–2211 Extension 7258 (Area code: 303)

Facilities for study and research are provided by the science and technology departments of the libraries of the University. There are collections in mathematics, physics, chemistry, life sciences, earth sciences, engineering sciences, medicine, nursing pharmacy, and psychology. Books, journals, and reports acquired are in English, Russian, Italian, French, German, and Spanish.

Library service is primarily for faculty and students of the University; however, reference assistance is given to the public when possible. Interlibrary loans are made; photocopying is done for a fee.

Medical Center

University of Colorado
4200 East Ninth Avenue
Denver, Colo. 80220
Telephone: 388–4511 (Area code: 303)

The Center's Denison Memorial Library consists of books and journals on medicine, denistry, nursing, and psychiatry. Literature in English, Russian, Italian, French, German, and Spanish is acquired. Reference and document services are furnished primarily for University personnel, but are extended to the public whenever possible. Interlibrary loans are made; photocopying is done for a fee.

Museum

University of Colorado
Broadway Between 15th and 16th
Boulder, Colo. 80302
Telephone: 443–211 Extension 6165 (Area code: 303)

The Museum's exhibition halls contain displays of minerals, rocks, and fossils; highlights of the plant and animal worlds, with particular emphasis on Colorado and Rocky Mountain forms; and samples of the cultures of widely separated primitive peoples of the present time. Included are synoptic series illustrating the North American Indian cultures, with special emphasis on those of the prehistoric Southwest and the Rocky Mountain region.

Nearly a million and a half specimens in addition to those on exhibit are available in the systematic collections for the use of advanced students and others with specialized interest in research in the fields represented. These are freely available for loan to other institutions.

A collection of books, journals, reports, films and photos, maps and charts has been organized on mineralogy and geology; vertebrate and invertebrate paleontology; paleobotany; cryptogamic and phanerogamic botany; vascular plants, lichens, bryophytes, fungi, and algae; invertebrate and vertebrate zoology; anthropology; ethnography; archeology, especially of the southwestern United States; history; and art. Languages represented are English, Russian, Italian, French, Spanish, and German. Technical questions are answered and literature searches performed without charge.

Regional Technical Reports Center

Main Library Building
University of Colorado Campus
Boulder, Colo. 80304
Telephone: 443–2211 Extension 7159 (Area code: 303)

Established to serve Colorado, New Mexico, North Dakota, South Dakota, Utah, and Wyoming, the Center is a depository for scientific and technical reports issued by the U.S. Atomic Energy Commission, the Department of Defense, the National Aeronautics and Space Administration, and other Government agencies and their contractors. The general public in the States named is provided with interlibrary loan, photocopy, and other services necessary to make the material accessible. There is a fee for the reproduction of reports to cover costs involved.

UNIVERSITY OF DAYTON

Research Institute

University of Dayton
300 College Park
Dayton, Ohio 45409
Telephone: 226–3731 (Area code: 513)

Sponsored by the U.S. Air Force, the Research Institute is establishing an information retrieval system based on in-depth indexing of selected documents dealing with adhesives, ceramics, cermets, graphites, coatings, elastomers, lubricants, electrical and electronic materials, fibrous materials, metals, oils, plastics, polymers, and manufacturing methods. Reference and document services are provided primarily to the Air Force but are available to representatives of other Government agencies and to their contractors upon approval by the sponsor.

University Library

University of Dayton
300 College Park
Dayton, Ohio 45409
Telephone: 226–3731 Extension 208 (Area code: 513)

The Library's holdings in science and technology include books and journals on chemistry, physics, mathematics, biology, computer science and technology, geology, and chemical, electrical, mechanical, industrial, and civil engineering. Languages in the collection are English, Russian, Spanish, French, and German.

The public is allowed to consult materials on the premises. Loans to individuals are restricted to students and faculty of the University of Dayton, but interlibrary loans are made.

UNIVERSITY OF FLORIDA

Agricultural Experiment Stations

University of Florida
Gainesville, Fla. 32603
Telephone 376–3261 Extension 2111 (Area code: 305)

The Agricultural Experiment Stations of the University of Florida conduct research and disseminate information on the development of production, handling, processing, distribution, and marketing of agricultural crops, products, and commodities of known or potential interest to the state.

At the main Station library in Gainesville, reports, books, and journals are collected in the areas of agriculture, agronomy, animal husbandry, dairy science, food technology, fruit crops, ornamental horticulture, plant pathology, poultry science, soils, vegetable crops, agricultural economics, entomology, forestry, and soils. Branch libraries are located at the various agricultural stations and laboratories. These are:

Central Florida Station
Box 327
Sanford, Fla.

Citrus Station
Lake Alfred, Fla.

Everglades Station
Post Office Drawer A
Belle Glade, Fla.

Gulf Coast Station
Box 2125, Manatee Station
Bradenton, Fla.

North Florida Station
Quincy, Fla.

Range Cattle Station
Ona, Fla.

Subtropical Station
Route 1, Box 560
Homestead, Fla.

Suwannee Valley Station
Box 630
Live Oak, Fla.

West Central Florida Station
Brookville, Fla.

West Florida Station
Route 3
Jay, Fla.

Big Bend Horticultural Laboratory
Box 539
Monticello, Fla.

Potato Investigations Laboratory
Box 728
Hastings, Fla.

Strawberry Investigations Laboratory
Plant City, Box 2386
Lakeland, Fla.

Weather Forecasting Service
Box 1058
Lakeland, Fla.

Watermelon and Grape Investigations Laboratory
Box 321
Leesburg, Fla.

Data are compiled on gladioli at the Gulf Coast Station, and on tobacco at the North Florida Station. At the Everglades Experiment Station books, journals and reports, including foreign documents, are collected on sugar cane, rice, and tropical botany. The Subtropical Experiment Station offers subject coverage in subtropical botany, tropical agriculture, and horticulture.

Information is disseminated primarily to Florida farmers, growers, and ranchers but also to research workers. The main Station library makes data compilations upon request and lends documents; its collections are accessible for direct use by approved visitors. An interlibrary loan service is available. Visitors are welcome at any of the units of the Florida Agricultural Experiment Stations, where staff members are available for consultation.

Publications issued by the Stations include technical reports, news releases and journals. Available without charge are the *Sunshine State Agricultural Research Report,* issued quarterly, and the *Annual Report.* Information bulletins on a variety of topics are also available without charge. Titles and catalog numbers are given in *List of Bulletins,* revised irregularly.

Bureau of Professional Relations

University of Florida
College of Pharmacy
Gainesville, Fla. 32603
Telephone 376–3261 Extension 5394 (Area code: 305)

The Bureau serves as an information center for improved liaison between medicine and pharmacy. It conducts a program to develop better prescription combinations. It also sponsors conferences, meetings, and training sessions for pharmacists and others concerned with pharmaceuticals. Types of publications issued include pharmacy standards and specifications and a professional relations bulletin.

Chemistry Library

University of Florida
216 Leigh Hall
Gainesville, Fla. 32603
Telephone: 376–3261 Extension 2419 (Area code: 305)

The Chemistry Library has a collection of books, journals, and reports pertaining to all aspects of chemistry, including general, physical, organic, inorganic, analytical, and nuclear. It is open for reference use; interlibrary loan and photoduplication services are available. The library issues *The Biblio-File,* a monthly announcement journal.

Computing Center

University of Florida
Box 3568, University Station
Gainesville, Fla. 32603
Telephone: 376–3211 (Area code: 305)

The Computing Center conducts research and provides consulting and computing services to the university and to outside organizations on a contractual basis. *Computing Center Report,* issued irregularly, provides information on services and research efforts.

Engineering and Physics Library

University of Florida
400 E and I Building
Gainesville, Fla. 32603
Telephone: 376–3261 Extension 2001 (Area code: 305)

Serving the College of Engineering and the Department of Physics, the Library has holdings of books, periodicals, and microcard copies of Atomic Energy Commission reports. All phases of physics, nuclear physics, and engineering are covered. The collection is open for reference use; interlibrary loan and duplicating services are available. A *List of Recent Acquisitions* is issued monthly.

Florida Engineering and Industrial Experiment Station

University of Florida
Gainesville, Fla. 32603
Telephone: 376–3211 Extension 2761 (Area code: 305)

Serving as the State's industrial development laboratory, the Station conducts research in ionics; public health engineering; metallurgy; chemical engineering; spectroscopy; air conditioning; soil mechanics; electronics; electrical equipment; paper, pulp, and wood products utilization; farm mechanization; corrosion; aircraft model wind tunnels; reinforced and prestressed concrete; hurricane tests of building material; coastal engineering laboratory; cobalt sources; and accident prevention engineering. It sponsors conferences and seminars and provides consulting services. The Station publishes *Engineering Progress at the University of Florida,* a review journal.

J. Hillis Miller Health Center Library

University of Florida
Gainesville, Fla. 32603
Telephone: 376–3211 Extension 5568 (Area code: 305)

The Library has holdings of books, journals, and reports in medicine, pharmacy, psychiatry, nursing and other health-related fields. Reference and loan services are available to anyone in the State showing genuine need for material.

UNIVERSITY OF HOUSTON

Libraries

Cullen Boulevard
Houston, Tex. 77004
Telephone: 224–1681 (Area code: 713)

Consisting of a central library and three branches, the University Libraries collect books and journals to meet the teaching and research requirements of the University. Subject coverage include the biological sciences; earth sciences; physical sciences; chemistry; physics; chemical, civil, electrical, mechanical, and petroleum engineering; economics; business administration; pharmacy; law; architecture; optometry; and psychology. Foreign literature is collected in Chinese, Russian, Japanese, Italian, and Spanish.

Reference and document services are available to the students and faculty of the university and to research workers in the metropolitan area by courtesy card. There are no restrictions on adult use of the collections on the premises. Journals are not circulated, but photocopies are provided in lieu of loan at nominal cost.

UNIVERSITY OF ILLINOIS

Agriculture Library

University of Illinois
225 Mumford Hall
Urbana, Ill. 61803
Telephone 333–2416 (Area code: 217)

A working collection for the College of Agriculture, the Library collects books and journals in general agriculture, with emphasis upon animal science, soil science, field crops, and agricultural economics. Agricultural literature is collected also from foreign countries, particularly India.

Reference and document services are available to students and staff members of the University and to others by special permission. Interlibrary loans are made.

Biology Library

University of Illinois
Urbana, Ill. 61803
Telephone: 333–3654 (Area code: 217)

The Biology Library serves as a reference source for the departments of botany, entomology, microbiology, physiology-biophysics, and zoology. There is a special collection in ornithology. Holdings consist of books and journals in all major languages. Films are also acquired.

Reference and document services are provided to students and staff members of the University and to others upon application. Material is available on interlibrary loan.

Chemistry Library

University of Illinois
Urbana, Ill. 61803
Telephone: 333–3737 (Area code: 217)

Holdings consist of books, journals, and films in all areas of chemistry and chemical engineering. Foreign literature is collected in Russian, Italian, Spanish, French, and German.

Reference and document services are available to students and staff members of the University and to others by permission. Interlibrary loans are made.

City Planning and Landscape Architecture Library

University of Illinois
203 Mumford Hall
Urbana, Ill. 61803
Telephone: 333–0424 (Area code: 217)

The Library maintains a working collection of books, reports, and periodicals on city planning, metropolitan area planning, regional planning, and landscape architecture. There is a special collection of slides. Material is drawn from English, Chinese, Russian, Japanese, Italian, Spanish, French, and German sources.

Reference and document services are available to students and staff members of the University and to others upon application. Interlibrary loans are provided.

Engineering Library

University of Illinois
119 Civil Engineering Hall
Urbana, Ill. 61803
Telephone: 333–3576 (Area code: 217)

The Library supports undergraduate and graduate studies in aeronautical and astronautical, agricultural, civil, electrical, general, mechanical, metallurgical, and nuclear engineering, and in theoretical and applied mechanics. Minor collections are maintained in petroleum and mining engineering. Foreign languages represented include Russian, Japanese, French, and German.

The Library is open to the public for on-site reference use. Liberal loan and photocopying services are provided to the scientific and technical community.

Geology Library

University of Illinois
223 Natural History Building
Urbana, Ill. 61803
Telephone: 333–1266 (Area code: 217)

The collection covers all aspects of geology, including mineralogy, paleontology, stratigraphy, economic geology, oceanography, geophysics, paleobotany, geochemistry, geomorphology, and micropaleontology. Holdings consist of books, journals, reports, including Government reports, and films. Most foreign languages are represented, with emphasis on Russian, Italian, Spanish, French, and German sources.

Reference and document services are available to students and staff members of the University and to others by special permission. Interlibrary loans are provided. A special collection of old and rare books on geology is available for on-site use.

Herbarium

University of Illinois
Natural History Building
Urbana, Ill. 61803
Telephone: 333–1000 (Area code: 217)

The University of Illinois Herbarium provides reference material for research in botany, particularly concerning the geographical distribution of species. It contains specimen collections of Illinois flora, including rare and extinct species; parasitic and other fungi, particularly tropical fungi from the Philippine Islands, Hawaii, and Puerto Rico; flora of the upper Mississippi; European flora; and a general collections of cultivated plants.

Identification services are available to State residents, whether scientists or amateurs. Facilities are provided for taxonomic research.

Illinois Agricultural Experiment Station

University of Illinois
109 Mumford Hall
Urbana, Ill. 61803
Telephone: 333–0240 (Area code: 217)

Supported by the State, the U.S. Department of Agriculture, and other institutions, the Illinois Agricultural Experiment Station conducts research and collects information on general agriculture, agricultural economics, agronomy, rural sociology, agricultural engineering, soil science, dairy science, animal science, plant pathology, forestry, horticulture, home economics, economic entomology, food science, and veterinary medicine.

Technical questions are answered directly, by providing publications, or through referral elsewhere; priority is given to State residents. Consulting services are available. There is a charge for technical services such as soil analysis; all other services are free.

Publications prepared by the Experiment Station include *Bulletins* and *Illinois Research,* a quarterly journal issued without charge.

Map and Geography Library

University of Illinois
Urbana, Ill. 61803
Telephone: 333–0827 (Area code: 217)

Holdings consist of books, journals, reports, atlases, and gazetteers on geography and cartography; the map collection provides world coverage and there is a special collection of Illinois aerial photographs. Foreign literature includes material in Russian, Italian, Spanish, and French.

Reference and document services are available to students and staff members of the University and to others by special permission. Direct loan privileges are extended to county residents; material is available on interlibrary loan to others.

Mathematics Library

University of Illinois
Urbana, Ill. 61803
Telephone: 333–0258 (Area code: 217)

The Library contains books and journals on pure and applied mathematics, mathematical logic, statisics and probability, computer theory and computations, and history and teaching of mathematics. Foreign literature includes material in all major languages.

The Library is open to the public for on-site reference use. Reference and document services are available to students and staff members of the University and to others by application or permit. Interlibrary loans are provided.

Physics Library

University of Illinois
Urbana, Ill. 61803
Telephone: 333–2101 (Area Code: 217)

A working collection for the Department of Physics, the Library covers most branches of physics, including cryogenics, crystalline state, field theory, high-energy physics, magnetic resonance, nuclear physics, particle accelerators, physics of metals, quantum mechanics, radiation damage, semiconductors, solid state, kinetic theory, and theoretical physics. There is a depository collection of U.S. Atomic Energy Commission reports. Material is collected in English, Russian, Italian, Spanish, French, and German.

Reference and document services are available to students and staff members of the University and to others by special permission. Material is also available on interlibrary loan.

UICSM Mathematics Project

University of Illinois
1208 West Springfield
Urbana, Ill. 61803
Telephone: 333–0150 (Area code: 217)

Supported by the National Science Foundation and the U.S. Office of Education, the UICSM Project is concerned with research in the teaching of school mathematics, the production of materials for instruction, and teacher training. Books and journals are collected on school mathematics education and learning theory.

Questions from the general public are answered; inquiries from educators and other researchers in the mathematics education area are welcomed. The project issues reports, a news journal, conference proceedings, teacher-training films, and textbooks for secondary school mathematics.

Veterinary Medicine Library

University of Illinois
Urbana, Ill. 61803
Telephone: 333–2193 (Area Code: 217)

The Library is primarily concerned with the field of veterinary medicine, but collects material also in human medicine and related sciences. Holdings consist of books, journals, and reports. Foreign language sources are primarily Russian, Italian, Spanish, French, and German.

Library services are restricted to students and staff members of the University, and to others receiving special permission. Interlibrary loans are made.

UNIVERSITY OF KENTUCKY

Agricultural Experiment Station

University of Kentucky
South Limestone
Lexington, Ky. 40506
Telephone: 252–2200 (Area code: 606)

The Station conducts research on the soils and crops of Kentucky, plant and animal diseases, feeds, fertilizers, pesticides, meat and dairy animals, poultry, agricultural economics, agricultural engineering, rural sociology, economic entomology, human and animal nutrition, genetics, and dairy manufacturers. It maintains a library of literature drawn from sources in all major languages. Resources and services of the library are available to the staff and students of the University, to the local community, and to others through interlibrary loan.

Publications are available to the public, in most cases without charge, from the Station's Bulletin Room. Analytical services in soils, feeds, seeds, nursery plants, animal and plant diseases, insects, and dairies and dairy products are available to Kentucky residents.

Kentucky Geological Survey

University of Kentucky
307 Mineral Industries Building
120 Graham Avenue
Lexington, Ky. 40506
Telephone: 252–2200 Extension 283 or 284 (Area code: 606)

A research and service organization, Kentucky Geological Survey gathers and disseminates information relative to the geology and mineral resources of the State. It conducts field and laboratory studies and publishes maps and reports.

Advisory and reference services are provided free. Well cuttings may be studied at the Survey well sample library. Logs, maps, and reports are available for reference and purchase.

Medical Center

University of Kentucky
Rose Street
Lexington, Ky. 40506
Telephone: 255–3600 (Area code: 606)

The educational program of the Medical Center is supported by a library collection on medicine, dentistry, and nursing. Works of William Harvey, discoverer of the circulation of blood, constitute a special collection. Current journals are received in English, Russian, Italian, Spanish, French, and German.

Material is available only for loan. Photocopies of journal articles will be sent in most cases, if the article is less than 10 pages.

University Libraries

University of Kentucky
Lexington, Ky. 40506
Telephone: 252–2200 (Area code: 606)

The University Libraries consist of a central library and departmental collections, totaling over a million volumes. Subjects emphasized are physics, chemistry, medical sciences, geology, microbiology, law, engineering, and mathematics. Covered also are art, architecture, music, agriculture, home economics, pharmacy, education, history, humanities, social sciences, and library science. The Libraries are a depository for U.S. Government reports. Acquired also are State documents, official documents of the British Government, and publications of the United Nations, including those issued by the International Labor Office, Food and Agricultural Organization, UNESCO, and the World Health Organization. Literature in all major languages is represented.

Members of the University of Kentucky community are given first preference in use of library facilities, but home loans are also made to permanent residents of Fayette County, Ky. All others may borrow by interlibrary loan or order microfilm or photocopies.

Wenner-Gren Aeronautical Research Laboratory

University of Kentucky
Lexington, Ky. 40506
Telephone: 252–2200 (Area code: 606)

The Research Laboratory conducts research and publishes technical reports on bioastronautics, biomechanics, behavioral biology, biomedical engineering, human factors, and environmental engineering. Data are available without charge, subject to security restrictions in some cases.

UNIVERSITY OF MAINE

Maine Agricultural Experiment Station

University of Maine
Holmes Hall
Orono, Maine 04473
Telephone: 866–7344 (Area code: 207)

The Station provides educational and informational assistance in agriculture, forestry, home economics, agricultural economics, agricultural engineering, animal pathology, animal science, biochemistry, botany and plant pathology, entomology, food science, plants and soils, and poultry science. Experimental farms are maintained by the Station at Monmouth, Presque Island, Chapman, and Jonesboro.

Technical reports and the quarterly *Maine Farm Research* are free on request.

Raymond H. Fogler Library

University of Maine
Orono, Maine 04473
Telephone: 866–4441 (Area code: 207)

Maintained primarily to serve the academic and research needs of faculty and students, the Library has a general collection in science and technology consisting of books, journals, patents, State and Federal documents, and a file of maps issued by the U.S. Army Map Service. The Library is also a regional depository for U.S. Government publications. The collection is available for on-site reference, and interlibrary loans are made. Periodical articles and other library materials not available on loan may be photocopied, subject to copyright regulations.

Technology Experiment Station

University of Maine
Orono, Maine 04473
Telephone: 866–7011 (Area code: 207)

The Station conducts practical research in the fields of geology and chemical, civil, electrical, and mechanical engineering. Services are provided for a fee to State and municipal departments and private industry.

UNIVERSITY OF MICHIGAN

Ann Arbor Seismograph Station

University of Michigan
Department of Geology and Mineralogy
Ann Arbor, Mich. 48104
Telephone: 633–1511 Extension 617 (Area code: 313)

The Station contains worldwide standard instruments and performs continuous recordings of seismic waves. Additional facilities consist of short-period seismometers in a 1,200-foot well. Seismograms are available through the U.S. Coast and Geodetic Survey Seismological Data Center, Washington, D.C., 20235.

Dentistry Library

University of Michigan
Dental Building
Ann Arbor, Mich. 48104
Telephone: 662–4581 (Area code: 313)

The Library has extensive collections in basic medical sciences, operative dentistry, dental medicine, and dental research. It also covers dental technology, dental hygiene, and dental public health. History of dentistry is well represented. Circulation and reference services are restricted to University of Michigan personnel. Interlibrary loans are available to others.

Infrared Information and Analysis Center

University of Michigan
Institute of Science and Technology
Box 618
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 281W (Area code: 313)

Sponsored by the Office of Naval Research, IRIA is a source for information on infrared technology with emphasis on military problems. Current project reports, received from Government contractors, are evaluated and coded for automatic retrieval. Subjects covered include cryogenics, optics, solid state physics, applied engineering, infrared technology, thermal radiation, and spectra.

Unclassified material is available for direct use by special arrangement with the Center. Proprietary and classified material is available only to authorized Government personnel, unless prior approval has been granted, and classified material is available through the usual security channels. Loans are not provided. The Center answers technical questions and, on special request, performs literature searches and prepares bibliographies.

The Center publishes reports, annotated bibliographies, conference proceedings, and state-of-the-art reviews. The *IRIA Annotated Bibliography* is issued quarterly.

Requests for inclusion on the distribution list for reports should be addressed to:

Office of Naval Research
Boston Branch Office
495 Summer Street
Boston, Mass. 02110

Requests for permission to visit the Center should be addressed to:

Security Office
University of Michigan
Institute of Science and Technology
Box 618
Ann Arbor, Mich.
Attention: Security Officer

Medical Center Library

University of Michigan
Kresge Medical Research Building
Ann Arbor, Mich. 48104
Telephone: 663–1531 Extension 539 (Area code: 313)

The collection consists of books and journals in the basic medical sciences, including clinical medicine, nursing, and the history of medicine. Circulation and reference services are restricted to University of Michigan personnel. Interlibrary loans are available to others.

Michigan Memorial-Phoenix Project

University of Michigan
North Campus
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 406N (Area code: 313)

A unit of the University of Michigan, the Project provides grants for research on the peaceful uses of nuclear energy in the physical, life, and social sciences. It also operates radiation research facilities. A University library in the Phoenix laboratory is a depository library of the U.S. Atomic Energy Commission. The library is open for on-site use, but reference services are restricted to University of Michigan personnel. Interlibrary loans are provided; journals are not circulated. Requests for consulting services should be addressed to the Office of the Director.

The Project publishes occasional technical and semitechnical reports on its research activities. Specific reports are available to industrial and educational groups on request.

Mineral Museum

University of Michigan
Department of Geology and Mineralogy
Ann Arbor, Mich. 48104
Telephone 663–1511 Extension 588 (Area code: 313)

The Museum has exhibit and research collections of rocks, minerals, ores, and meteorites, including special collections relating to Michigan; Sicilian sulfur; radioactive rocks; Antarctic rocks; and pre-Cambrian specimens from the western United States. The Museum provides free consulting services and makes its collections available for direct use to all interested scientists.

Museum of Anthropology

University of Michigan
University Museums Building
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 2421 (Area code: 313)

A Museum's specimen collection relates particularly to American archeology and Far Eastern ceramics. An organizational part of the Museum is the Ethnobotanical Laboratory which was established to identify and interpret plant materials from North American archeological sites or Indian tribes, supply information concerning the relationships of man and plants, and maintain a data collection on ethnobotanical subjects from published and unpublished laboratory and museum sources. The ethnobotanical collection has data on the uses of plants by Indians, the origin and development of agriculture in the Americas, ecological relationships of Indians and vegetation, plant utilization and technology by topic and area, and types and varieties of crop plants. The materials of the Museum are available for on-site reference.

Analysis of materials submitted to the Ethnobotanical Laboratory is performed without charge or for a negotiated fee. Literature searches are made and technical inquiries answered. Serial publications of the Museum include *Occasional Contributions from the Museum of Anthropology* and *Anthropological Papers from the Museum of Anthropology,* issued irregularly.

Museum of Paleontology

University of Michigan
Washtenaw and North University Avenues
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 2441 (Area code: 313)

The Museum of Paleontology assembles specimens, field data, and literature to support research on fossil organisms, stratigraphy, and related geologic problems. The collection consists of morphologic, taxonomic, and stratigraphic information on fossil vertebrates, invertebrates, and plants of the United States and includes data on species from North, South, and Central America, Europe, and Asia. A special area of interest is the identification and classification of fossils from well cores and outcrops.

The Museum answers technical inquiries, performs literature searches, and for a fee makes recommendations to industrial organizations regarding the locating and exploitation of mineral deposits. Bona fide investigators may examine the fossil collections and have direct access to the Museum's library. Books are available on interlibrary loan. The Museum publishes *Contributions from the Museum of Paleontology,* a primary journal issued irregularly. A price list is available on request.

Museum of Zoology

University of Michigan
Ann Arbor, Mich. 48104
Telephone: 663–1511 (Area code: 313)

The Museum of Zoology maintains a research collection of zoological specimens. It also has library collections and a depository of reports and data in the areas of zoological systematics and evolutionary biology, mammalogy, ornithology, herpetology, ichthyology, entomology, especially Odonata, Orthoptera, and Homoptera; zoogeography; comparative animal behavior; bioacoustics; malacology, including snail-borne diseases; and community ecology.

Use of the collections is available to qualified students. The Museum provides consulting services by arrangement. The *Miscellaneous Publications* and *Occasional Papers* of the Museum are for sale or exchange; free distribution is limited to specialists of standing.

Public Health Library

University of Michigan
School of Public Health
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 2398 (Area code: 313)

The Library's holdings of books and journals pertain to public health and related biological and engineering sciences, occupational health, and air pollution. Reference and document services are limited to University of Michigan personnel; interlibrary loans are available to others.

Science and Engineering Libraries

University of Michigan
University Library
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 2036 and 2087 (Area code: 313)

The Science and Engineering Libraries consolidate the collections and services of eight specialized libraries: Biological Station Library, Engineering Library, Astronomy Library, Chemistry-Pharmacy Library, Mathematics Library, Physics Library, Museums Library, and Transportation Library, all of which are located on campus, except the Biological Station Library which is located at Pellston, Mich. Holdings consist of books, journals, and reports in various areas of science and technology, including biology; zoology; ichthyology; botany, engineering, with emphasis on chemical, electrical, mechanical, industrial, aeronautical, naval, marine, civil, computer, and bioengineering; food technology; pure and applied mathematics; astrophysics and astronomy; chemistry; pharmacy and pharmaceutical chemistry; physics; acoustics; photography; biophysics; radiology; anthropology; paleontology; natural history; and transportation. Foreign literature includes all major European languages.

Reference and document services are primarily for students and faculty of the University; however, the libraries are open for on-site use. Journals are not available for loan, but photocopies are provided. Books are available on interlibrary loan.

Statistical Research Laboratory

University of Michigan
106 Rackham Building
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 2768 (Area code: 313)

The Laboratory provides technical consultations on statistical theory and methodology. Service is limited to members of the University of Michigan and to other publicly supported educational and scientific agencies.

Subsurface Laboratory and Core Library

University of Michigan
Department of Geology and Mineralogy
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 3512 and 617 (Area code: 313)

Assisted by oil companies, the Laboratory collects subsurface rock materials from Michigan and adjacent areas and acquires drill data for sedimentary rock and stratigraphic studies. The holdings of the Core Library consist of mounted well cores and logs, electric logs from oil and gas wells in the Michigan Basin, and drilling records.

The Laboratory answers requests for information on mineral or petroleum deposits and makes its collections accessible for direct use. Services are without charge and are available to all scientists and interested organizations. An annual index to the collections is available.

University Herbarium

University of Michigan
North University Building
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 2461 (Area code: 313)

The Herbarium prepares monographs on taxonomic botany, particularly the Great Lakes flora, the flora of Mexico, and the mushrooms of North America. A limited identification service is available without charge on speciments of interest to the various research programs. *Michigan Botanist,* issued quarterly, is free to members of the Michigan Botanical Club and is available to others on a subscription basis. The classified collections are accessible to qualified investigators Loans of specimens can be arranged.

Vela Seismic Information Analysis Center

University of Michigan
Institute of Science and Technology
Box 618
Ann Arbor, Mich. 48104
Telephone: 663–1511 Extension 294W (Area code: 313)

Sponsored by the Department of Defense, the Center is a source of information concerning seismological research and development in support of the Vela Uniform Program. Reports, journals, books, and other data are collected in the areas of seismology; subsurface explosions, including nuclear; groundnoise; microseisms; artificial earthquakes; elastic waves; geological structures; ground movement instrumentation and detection; and ocean bottom seismology. Literature in all major languages, including Japanese and Swedish, is represented.

Information services are available to Government agencies, their contractors and the seismological community. The Center performs literature searches, provides answers to technical inquiries concerning natural and artificial seismic disturbances, and prepares bibliographies and state-of-the-art reviews. Interlibrary loans are provided. Security regulations govern access to classified material.

Publications available without charge include: *Vela Uniform Periodic Information Digest,* a news journal; *Bibliography of Seismology for the Vela Uniform Program,* an abstract bibliography issued quarterly; *Compendium of Contract Information in the Vela Uniform Program,* a report issued every 6 months; state-of-the-art reports; and special reports dealing with seismological research problems. The Center has also prepared a technical film, "The World-wide

Standard Seismograph Program," which is available to the public on 30-day loan.

UNIVERSITY OF NEVADA

Agricultural Experiment Station

University of Nevada
Reno, Nev. 89507
Telephone: 323–2081 (Area code: 702)

In addition to agricultural research programs to promote the efficient production, marketing, distribution, and utilization of agricultural products, Station personnel conduct scientific investigations of arid land agricultural problems. These include problems arising from soil conditions, animal disease, internal parasites of animals, insect pests, plant diseases, and animal and plant breeding. Sources in English, Russian, Italian, Spanish, French, and German are represented. Reference and document services are available to the public.

The *Ranch and Home Review,* issued semiannually, is available free to State residents and through library exchange.

Biology Museum and Research Laboratories

University of Nevada
Reno, Nev. 89507
Telephone: 323–2081 (Area code: 702)

The Museum has taxonomic collections of over 50,000 specimens of Nevada flora and fauna, with emphasis on Nevada angiosperms, gymnosperms, birds, reptiles, amphibians, fishes, insects, and invertebrates. Laboratory investigations include electron microscopy and desert research. Reference and consulting services are provided without charge to professional personnel.

Desert Research Institute

University of Nevada
Reno, Nev. 89507
Telephone: 323–2081 Extension 450 (Area code: 702)

The Institute conducts research on a grantor contract basis for industry, Government and State agencies, private institutions, and individuals. Studies include hydrology, atmospheric physics, climatology, geochemistry, biochemistry, chemistry, solid state physics, vacuum physics, biology, materials science, seismicity, and X-ray spectrographic analysis. In addition to its laboratory facilities, the Institute also administers the Charles and Henriette Fleischmann Atmospherium-Planetarium, in which lapsed-time photographs of the entire sky are projected on a dome for accelerated, dynamic portrayal of typical and extreme atmospheric conditions. Information concerning current projects and availability of research reports is provided on request.

Library

University of Nevada
Reno, Nev. 89507
Telephone: 323–2081 (Area code: 702)

The Library contains a broad collection of books and journals and is a depository for Federal and State documents. Material on mineral industry and earth sciences is housed in the Mackay School of Mines library. Other subjects include Nevada history and history of the West, agriculture, engineering, physics, chemistry, and economics. Foreign publications are in French, German, Italian, Spanish, and Russian.

Holdings are available for use by the local scientific and technical community. Reference and photocopying services are provided, and interlibrary loans are made.

Mackay School of Mines

University of Nevada
Reno, Nev. 89507
Telephone: 323–2081 (Area code: 702)

Professional training in science and technology as related to the mineral industry is provided by the School through its departments of geology-geography, metallurgy, and mining. The academic program is implemented by an extensive, selected library collection. Material is drawn from sources in English, Russian, Spanish, French, and German; private reports are included.

The library is accessible for on-site use. Reference, document, and consulting services are provided as time and staff permit.

Nevada Bureau of Mines

University of Nevada
Reno, Nev. 89507
Telephone: 323–2081 (Area code: 702)

A public service division of the Mackay School of Mines, the Bureau assists the mineral industry in the development and utilization of Nevada's mineral resources by conducting field studies of the mineral deposits and geologic formations throughout the State, by aiding prospectors and mining companies in their search for mineral and oil deposits, and by collecting data on the mineral industry of Nevada.

Reference and consulting services are provided without charge. The Nevada Bureau of Mines bulletins, reports, and maps are issued at irregular intervals.

Nevada Mining Analytical Laboratory

University of Nevada
Reno, Nev. 89507
Telephone: 323–2081 (Area code: 702)

A public service division of the Mackay School of Mines, the Laboratory assists the mineral industry by making free identifications, assays, and processing tests of minerals, ores, and rocks taken from within the boundaries of Nevada. Results of these studies are reported to the senders together with the uses and values of the materials submitted.

The records of the Laboratory are open to public inspection, but visitors are not permitted to see copies of reports until sufficient time has elapsed for the original reports to reach the addressees.

UNIVERSITY OF NEW HAMPSHIRE

Agricultural Experiment Station

University of New Hampshire
Durham, N.H. 03824
Telephone: 868–5511 Extension 221 (Area code: 603)

Consisting of a research laboratory and field plots, the Station conducts investigations in areas pertaining to plant and animal sciences, resource economics, forestry, soils and water, and home economics. Technical questions are answered and referrals made. Consulting services are available as time and staff permit. No fees are charged.

The *New Hampshire Progress Report,* issued irregularly, is distributed free.

Engineering Experiment Station

University of New Hampshire
Durham, N.H. 03824
Telephone: 868–5511 Extension 233 (Area code: 603)

Engineering and research facilities are provided by the Station for the industries of the State and for Government agencies. Projects range from basic areas of mathematics, physics, and chemistry to specific studies in the applied enginering field, including chemical, civil, electrical, and mechanical engineering. There are facilities for physical tests on metals, chemical analyses, microscopy, and spectrographic and X-ray diffraction studies, as well as for developing special test procedures.

Technical questions are answered free; consultations are provided for a fee. There is controlled, free distribution of the quarterly *New Hampshire Horizons.*

UNIVERSITY OF NORTH CAROLINA

Unless otherwise indicated, the libraries of the University make their collections available for on-site use, provide reference service, and lend holdings through interlibrary loan channels.

Agricultural Experiment Station

Post Office Box 5847, College Station
Raleigh, N.C. 27607
Telephone: 834–5211 Extension 315 (Area code: 919)

The Station conducts practical research related to crop and livestock production and marketing in North Carolina, makes investigations for various State and municipal departments, and on request furnishes information on animal industry, entomology, poultry science, zoology, chemistry, field crops, horticulture, plant pathology, soils, botany, bacteriology, forestry, agricultural economics, experimental statistics, and rural sociology.

The Station's literature collection is maintained at the D. H. Hill Library of the University at Raleigh. It is accessible to all for on-site use. Consulting service is rendered to a degree consistent with the needs of the State and industry and the qualifications of personnel. Documents are sent in reply to technical inquiries. No fees are charged. Publications are provided to libraries on an exchange basis.

Publications issued by the Station include the quarterly *Research and Farming,* the monthly *Tarheel Farm Economist,* the quarterly *Agricultural Policy Review,* and the *Annual Report.*

Botany Library

University of North Carolina
Coker Building
Chapel Hill, N.C. 27515
Telephone: 942–3030 (Area code: 919)

The collection of books, journals, and reports covers botany in general, with emphasis on algology, morphology, plant anatomy, mycology, and plant physiology.

Chemistry Library

University of North Carolina
Venable Hall
Chapel Hill, N.C. 27515
Telephone: 968-2661 (Area code: 919)

Holdings consist of books and journals in chemistry, with stress on physical and theoretical chemistry.

Computation Center

University of North Carolina
Phillips Hall
Chapel Hill, N.C. 27515
Telephone: 968-7037 (Area code: 919)

The facilities of the Center serve to assist instruction and research in computer sciences and their application throughout the University. A literature collection is available for on-site use; reference service is provided. Photocopying is done to a limited extent.

The Center reports on its research in a monographic series issued irregularly in looseleaf form. Copies are available free on request.

Division of Health Affairs

University of North Carolina
North Carolina Memorial Hospital
Chapel Hill, N.C. 27515
Telephone: 266-8433 (Area code: 919)

The collections for the Schools of Medicine, Public Health, Dentistry, Pharmacy, and Nursing are located in the Division of Health Affairs library. Coverage includes medicine, medical history, medical technology, paramedical subjects, dentistry, dental history and technology, environmental sciences, sanitation and sanitary engineering, public health and public health history, nursing, nursing history, pharmacy, and pharmaceutical industry and history. Holdings consist of books, journals, reports, and films. Foreign publications are in Chinese, Russian, Japanese, Italian, Spanish, French, and German.

Facilities may be used on the premises by anyone. Consulting, reference, and photocopying services are available. Material is circulated to health personnel within the State. Loans to libraries outside the State are made.

Geology Library

University of North Carolina
Mitchell Building
Chapel Hill, N.C. 27515
Telephone: 942-3965 (Area code: 919)

The Library has books, journals, reports, and maps and charts related to geology in general, with special coverage in economic geology, geomorphology, mineralogy, crystallography, petrology, sedimentation, stratigraphy, and structural geology.

D. H. Hill Library

University of North Carolina at Raleigh
Raleigh, N.C.
Telephone: 834-5211 (Area code: 919)

The D. H. Hill Library provides subject coverage in the fields of engineering, agriculture, forestry, textiles, architecture, biological sciences, genetics, and statistics. Special collections include the Tippmann collection on entomology and the Schenck collection on forestry. Holdings consist of books and journals.

A tobacco literature service is available. Material may be borrowed on interlibrary loan. Duplicating services are provided. The Library issues *Tobacco Abstracts.*

Mathematics-Physics Library

University of North Carolina
Phillips Hall
Chapel Hill, N.C. 27515
Telephone: 942-1852 (Area code: 919)

The collection of books, journals, and reports deals with mathematics, specifically algebra, analysis, applied mathematics, geometry, number theory, statistics, and topology. It also covers physics, with emphasis on atomic, molecular, electromagnetic, nuclear, solid state, and theoretical physics.

Zoology Library

University of North Carolina
Wilson Hall
Chapel Hill, N.C. 27515
Telephone: 942-4256 (Area code: 919)

Holdings consist of books, journals, and reports on zoology, particularly cytology, genetics, marine biology, and physiology.

UNIVERSITY OF NOTRE DAME

Unless otherwise indicated, the libraries of the University place no restrictions on on-site use of materials. Reference service is provided. Circulation is limited to campus personnel, but interlibrary loans are made.

Biology Library

University of Notre Dame
Biology Building
Notre Dame, Ind. 46556
Telephone: 284–7209 (Area code: 219)

Holdings pertain to general biology, botany, zoology, physiology, and bacteriology. There are special collections on the history of botany and herbals of the 16th, 17th, and 18th centuries. Domestic and foreign periodicals in English, Russian, Italian, Spanish, French, and German are received.

Chemistry-Physics Library

University of Notre Dame
Nieuwland Science Building
Notre Dame, Ind. 46556
Telephone: 284–7203 (Area code: 219)

The collection contains books, journals, and reports in chemistry; physics; and chemical engineering. Publications in Russian, Italian, Spanish, French, and German are included.

Engineering Library

University of Notre Dame
Engineering Building
Notre Dame, Ind. 46556
Telephone: 284–6665 (Area code: 219)

This library serves the College of Engineering and provides materials in the fields of civil, mechanical, aeronautical, and electrical engineering, with strong holdings in metallurgy and theoretical and applied mechanics. The collection includes current issues of technical periodicals, reference and textbooks, research monographs, index and abstracting journals, and a file of technical reports. Languages represented are English, Russian, Italian, Spanish, French, and German.

Lobund Laboratory

University of Notre Dame
Lobund Building
Notre Dame, Ind. 46556
Telephone: 284–7564 (Area code: 219)

The research program of the Lobund Laboratory includes studies on the characteristics of germ-free vertebrates and their use in research on dental caries, host-parasite relationships, radiation effects, nutrition, virology, oncology, gnotobiotics, axenics, population dynamics, experimental surgery, and bioengineering.

The literature collection is open for on-site reference and technical questions are answered; instruction is provided to qualified technical personnel without charge.

Mathematics and Computing Science Library

University of Notre Dame
Computing Science Building
Notre Dame, Ind. 46556
Telephone: 284–7278 (Area code: 219)

American and foreign books and journals on pure and applied mathematics and on the theory and application of computing science are acquired by the Library.

UNIVERSITY OF OKLAHOMA

Bureau of Water Resources Research

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 (Area code: 405)

The Bureau is a clearinghouse for information on water resources research in the State and the Southwest. Data are collected on engineering, hydrology, economics, demography, and law as they relate to water resource activity. The collection is accessible for direct use by approved visitors.

Technical questions are answered free; there is a charge for consultant services and research. Information is also disseminated in individual research bulletins, prepared approximately every 2 months.

Chemistry Library

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 Extension 2333 (Area code: 405)

A reference source for students in degree programs at the University, the Library has a collection of books, journals, and reports in all areas of chemistry and biochemistry. Foreign literature includes all major European languages.

Assistance in locating materials is provided to any visitor. Searches in response to specific requests from off-campus personnel are made within time available. Material may be borrowed only on interlibrary loan; requests should be directed to the Government Depository Library.

College of Engineering Library

University of Oklahoma
Felgar Hall
Norman, Okla. 73069
Telephone: 536–0900 Extension 2148 (Area code: 405)

A reference source for students and faculty in engineering, the Library has a collection of books, journals, reports, and data on all aspects of technology and pure science. Foreign literature includes material in French, German, and Russian.

The Library is open to the public. Reference service is provided to any legitimate research project or college through interlibrary loan.

Computation Center

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 Extension 2091 (Area code: 405)

Numerical data from computer sources located at the University are collected and processed by the Center. A library of books, journals, and reports is maintained in the fields of engineering computations, numerical analysis, medical and biological computations, data searching, mathematical tables in number theory, and related areas.

The Center answers technical questions, prepares data compilations upon request, and lends computer programs. Technical-consultant services are available for a fee. Computation and data processing services are available for research purposes to professors from any college or university on a gratis or at-cost basis. Commercial rates apply to others. The library is available for direct use by serious researchers. Current project reports, punched cards, and magnetic tapes of programs are available at cost.

Core Library

University of Oklahoma
School of Geology
Norman, Okla. 73069
Telephone: 536–0900 Extension 2119 (Area code: 405)

The Library stores rock cores and samples from boreholes which are cataloged on file cards, showing location of holes by land division and the intervals cored or sampled. An additional card catalog is maintained which gives names of geologic formations of cored sections.

Cores and samples on file from the State of Oklahoma are loaned to interested companies or individuals for a nominal fee. A list of cores in storage, giving name of borehole, location, interval, and geologic formation cored is sent periodically to interested persons as new cores are added to the collection. The collection is accessible for direct use; rooms for examination, boxing, and shipping are provided.

Geology Library

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 Extension 2278 (Area code: 405)

Serving both the School of Geology and the Oklahoma Geological Survey, the Library collects books, journals, reports, maps, and data on geology-paleontology, palynology, mineralogy, and geophysics. There are special collections on electric logs, Oklahoma Corporation Commission Well Logs, and Research Oil Scout tickets for Oklahoma. Material is collected in English, Chinese, Russian, Japanese, Italian, Spanish, French, and German.

The collections are accessible for on-site use, and microfilms are available through interlibrary loan. Reference and document services and literature searches are provided as time permits.

Government Depository Library

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 Extension 2105 (Area code: 405)

The Government Depository Library, known also as the Bizzell Memorial Library, maintains a report collection in nuclear science, serving as a depository for publications of the U.S. Atomic Energy Commission. It provides document and reference services and is open to the public.

Mathematics Library

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 Extension 2416 (Area code: 405)

The mathematics collection contains all major journals in the field, both domestic and foreign, as well as many minor journals of current research interest in mathematics and computer science. The collection of books supports the University's postgraduate curriculum in pure and applied mathematics and computer sciences. Visitors are welcome and copying services are available at nominal rates.

Medical Center Library

University of Oklahoma
801 Northeast 13th Street
Oklahoma City, Okla. 73104
Telephone: 236–1366 Extension 628 (Area code: 405)

The Medical Center Library has a collection of books, journals, and reports in medicine, biochemistry, and the biological sciences. Materials are collected in English, Italian, Spanish, French, and German. A reference and document service is provided only for Medical Center personnel. Others may borrow through interlibrary loan. Photocopies are furnished at a nominal fee.

Palynology Research Center

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 (Area code: 405)

The Center collects data in all fields of palynology and makes special investigations in fields related to geology. Journals, periodicals, and books are collected on palynology, stratigraphy, morphology, taxonomy, and aerobiology. Foreign literature and data include material in Russian, German, French, Polish, and Japanese.

Technical questions are answered and literature searches performed. There is no charge for academic information; fees vary for industrial use.

Physics Library

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 Extension 2000 (Area code: 405)

To meet student program needs, the Physics Library has a collection of books, journals, and reports in various areas of physics, including nuclear physics. An interlibrary loan service for non-University personnel is available. Duplication of noncopyright materials is provided at a nominal fee.

Science Library

University of Oklahoma
Norman, Okla. 73069
Telephone: 536–0900 Extension 2143 (Area code: 405)

The Library serves the educational and research needs of the students and faculty. Books, journals, and reports are collected on botany, zoology, mathematics, and anthropology. Foreign languages represented include Russian, Italian, Spanish, French, and German. Reference service is provided to any legitimate research project through interlibrary loan or other forms of contact.

UNIVERSITY OF PENNSYLVANIA

Allied Medical Professions Library

University of Pennsylvania
3901 Pine Street
Philadelphia, Pa. 19104
Telephone: 594–8512 (Area code: 215)

Operated by the School of Allied Medical Professions, the Library has a basic textbook and journal collection in the fields of physical therapy, occupational therapy, medical technology, and related medical areas. The collection is open to the public by special permission. There is no interlibrary loan service, but direct borrowing privileges for circulating items are extended upon approved application to the Van Pelt Library.

Biology Library

University of Pennsylvania
38th and Hamilton Walk
Philadelphia, Pa. 19104
Telephone: 594–8393 (Area code: 215)

The Biology Library has a basic collection of books and journals in general biology, cytology, genetics, ecology, entomology, plant physiology, botony, zoology, anatomy, physiology, parasitology, and protozoology. The Library is open to the public for reference use; interlibrary loan and reference services are provided. Direct borrowing privileges and duplicating services are available upon approved application to the Van Pelt Library.

Charles Patterson Van Pelt Library

University of Pennsylvania
3420 Walnut Street
Philadelphia, Pa. 19104
Telephone: 594–7554 (Area code: 215)

The Library provides subject coverage for the University's degree and research programs, having holdings of books, journals, reports, and data in the arts, the pure sciences, the social sciences, and technology. There are special collections of archival and historical materials. Most languages are represented, including the African. Complete coverage is provided in all branches of science and technology, with the exception of agriculture, through a University-wide library system consisting of the Van Pelt Library and 30 school, department, and affiliated libraries. Books and other material located at the branch libraries are listed in the union catalog of the Van Pelt Library.

A free reference service is provided, including the compilation of bibliographies on request. Preference is given to faculty members and to scholars who have no access to major libraries. The Library is open to the public for reference use; an interlibrary loan service is available, and direct borrowing privileges for circulating items are extended upon approved application. Photocopying services are provided at cost. The *Library Chronicle,* a semiannual journal supplying information on the research holdings of the University library system and on scholarly projects, is available by purchase or through interlibrary loan.

Edgar Fahs Smith Memorial Collection

University of Pennsylvania
420 Hare Building
34th and Spruce Streets
Philadelphia, Pa. 19104
Telephone: 594–7553 (Area code: 215)

A scientific historical library, the Collection consists of books, journals, and reports on the history of alchemy, chemistry, and allied disciplines; alchemical and chemical manuscripts and early works; manuscript letters of chemists; photographic prints of chemists and chemical apparatus; medallions; and special holdings on Boyle and Priestly. Foreign literature is collected in Russian, Italian, Spanish, French, German, and the Scandinavian and oriental languages. The collection is gradually being broadened to cover the history of science in general.

The Library is open to the public for reference; books are available on interlibrary loan. Photocopying services are provided through the Van Pelt Library. *Chymia, Annual Studies in the History of Chemistry,* may be obtained on subscription.

Evans Dental Library

University of Pennsylvania
4001 Spruce Street
Philadelphia, Pa. 19104
Telephone: 594–8969 (Area code: 215)

A branch of the Dental School, the Library has a collection of books, journals, reports, and audiovisual materials in all fields of dentistry and related disciplines, including microbiology, pathology, and the basic sciences. An attempt is made to maintain a complete collection of dental periodicals, both domestic and foreign. The Library has holdings of historical dental interest, as well as an up-to-date working collection. Languages represented are English, Russian, Italian, Spanish, French, and German.

Reference, document, and interlibrary loan services are provided. The collections are available for onsite use by the general public; personal loans are restricted to members of the dental profession. An announcement journal is issued.

Flower and Cook Observatory

University of Pennsylvania
Philadelphia, Pa. 19104
Telephone: 594–8176 (Area code: 215)

The Observatory is a source for published and unpublished information on eclipsing binary stars. Collections consist primarily of astronomical journals and includes material in French, German, Russian, and to a lesser extent, Italian and Spanish.

Literature searches are performed, technical questions are answered, and data compilations are prepared on request for individuals working in the field of eclipsing binary stars. The Observatory will supply by mail references from its card catalog of eclipsing variables. Holdings are accessible for direct use by approved visitors. *Finding List for Observers of Eclipsing Variables* is published on an average of once every 10 years and distributed without charge.

George S. Cox Medical Research Institute

University of Pennsylvania Hospital
36th and Spruce Streets
Philadelphia, Pa. 19104
Telephone: 382–4600 Extension 2376 (Area code: 215)

A clinical and laboratory research unit of the University of Pennsylvania Medical School, the Institute conducts research and is a source for information on diabetes mellitus, adipose tissue metabolism, aortic tissue metabolism, and hormonal regulation of carbohydrate metabolism. Technical questions are answered and reprints of articles published by the staff are provided to interested investigators. Research findings are disseminated by means of reports.

Johnson Research Foundation

University of Pennsylvania School of Medicine
Alfred N. Richards Building
Hamilton Walk
Philadelphia, Pa. 19104
Telephone: 594–8796 (Area code: 215)

The Foundation performs research in biophysics, physical biochemistry, and cellular physiology. It maintains a working collection of books and journals, which are available for on-site use.

C. J. Marshall Memorial Library

University of Pennsylvania
39th and Pine Streets
Philadelphia, Pa. 19104
Telephone: 594–8874 (Area code: 215)

Administered by the School of Veterinary Medicine, the Library has books and journal holdings on all aspects of veterinary medicine and animal husbandry, including a special collection of material on horsemanship. Foreign literature is collected in Japanese, Italian, Spanish, French, German, and Czech. The Library makes its collections available to the public for reference use. Direct borrowing privileges are extended upon approved application to the Van Pelt Library, through which also interlibrary loans are provided.

Mathematics-Physics Library

University of Pennsylvania
Philadelphia, Pa. 19104
Telephone: 594–8173 (Area code: 215)

The Library has holdings of books and journals in mathematics, physics, and astronomy and is a depository for U.S. Atomic Energy Commission reports. Foreign literature includes materials in Russian, Italian, Spanish, French, and German.

A consulting service is provided. The Library is open to the public for reference use. Book loans are restricted to members of the University; however, an interlibrary loan service is available. All journals are restricted to on-site use.

Medical School Library

University of Pennsylvania
36th Street and Hamilton Walk
Philadelphia, Pa. 19104
Telephone: 594–8094 (Area code: 215)

A reference library for students, faculty, and research staffs, the Medical School Library has a collection of books and journals in medicine and the allied sciences. It is open to the public for reference use; borrowing privileges are limited to members of the University.

Moore School of Electrical Engineering Library

University of Pennsylvania
200 South 33d Street
Philadelphia, Pa. 19104
Telephone: 594–8135 (Area code: 215)

The Library has a book, journal, and report collection in the areas of electrical engineering, electronics, control and instrumentation, computers, electromedicine, and allied fields, such as mathematics and physics. Foreign literature is collected in Russian, Italian, Spanish, French, and German. The collection is open to the public for reference use; material is available for interlibrary loan; direct borrowing privileges for circulating items are extended upon approved application to the Van Pelt Library. Duplicating services are provided for a charge.

Morris Arboretum Library

University of Pennsylvania
9414 Meadowbrook Avenue
Philadelphia, Pa. 19118
Telephone: 247–5232 (Area code: 215)

A reference resource for the University's Botanical Garden, the Morris Arboretum Library has holdings of books and journals in botany and horticulture, especially on subjects related to woody plants of the temperate world. Foreign literature is collected in Russian, Italian, Spanish, French, and German.

The Library is available to the public for on-site reference. Material is available for loan to associates of the Arborteum and to members of the University through the Van Pelt Library, to which interested persons may also apply for an extension of direct borrowing privileges. The *Quarterly Bulletin,* available on a yearly subscription, is issued by the Arborteum.

Nursing School Library

University of Pennsylvania
205 South 34th Street
Philadelphia, Pa. 19104
Telephone: 594–8241 (Area code: 215)

A collection of books and journals on all aspects of nursing, and some material in allied medical sciences, is maintained by the Library, primarily for the students and faculty of the Nursing School. Limited interlibrary loans are available through the Van Pelt Library.

Power Information Center

University of Pennsylvania
103 Moore School Building
200 South 33d Street
Philadelphia, Pa.
Telephone: 594–8683 (Area code: 215)

Sponsored by the Interagency Advanced Power Group of the U.S. Government, the Center is a source of technical information for the IAPG and for certain designated non-Government organizations. Reports and data are collected on various aspects of nonpropulsive power, including electrochemistry, electromagnetics, electrostatics, magnetohydrodynamics, thermionics, thermoelectrics, photoelectrics, mechanical conversion techniques; and chemical, nuclear, and solar energy sources.

The Center provides a reference service and prepares project briefs containing summaries of Government-sponsored research and development programs in advanced nonpropulsive power. These are distributed on the basis of a prescribed mailing list under the control of IAPG. Industrial or non-Government organizations desiring to receive project briefs must first obtain the approval of IAPG. Briefs on classified projects or future programs are not available to non-Government organizations. Periodically, the Center publishes an index, giving brief number, project title, and status. Also issued are published proceedings of IAPG's technical discussions with industry. Copies of these proceedings are made available to the Defense Documentation Center Cameron Station, Alexandria, Va., 22314, for distribution to all qualified requesters.

Projects Summit and Spice Rack

University of Pennsylvania
37th and Walnut Streets
Philadelphia, Pa. 19104
Telephone: 594-8568 (Area code: 215)

Supported by the U.S. Army and Air Force, Projects Summit and Spice Rack comprise a security-restricted information center on biological and chemical warfare. Books, reports, data, maps, and charts are collected on all aspects of biological and chemical warfare, including techniques, materials, delivery systems, psychological and political implications, weather conditions, defense against, and medical aspects. Information and services are available only to internal personnel and sponsoring Government agencies. The Center compiles bibliographies and prepares technical reports, conference proceedings, indexes, and announcement publications.

Towne Scientific Library

University of Pennsylvania
33d and Locust Streets
Philadelphia, Pa. 19104
Telephone: 594-8340 (Area code: 215)

The Towne Scientific Library has holdings of books, journals, reports, and data on chemistry and nonelectrical engineering subjects. There are specialized collections on chemical, nuclear, aeronautical, mechanical, civil, and metallurgical engineering; materials science; chemistry; and engineering mechanics. Languages represented are English, Russian, Italian, Spanish, French, and German.

The Library answers technical inquiries and provides reference and duplicating services. It is open to the public for reference use; an interlibrary loan service is available. Direct borrowing privileges for circulating items are extended upon approved application to the Van Pelt Library. Journals do not circulate under any condition.

University Hospital Library

University of Pennsylvania
3400 Spruce Street
Philadelphia, Pa. 19104
Telephone: 382-4600 (Area code: 215)

The Library has holdings of books and journals in medicine and surgery with special emphasis on clinical specialties. It is open for reference to professional workers in medical and allied fields; books may be borrowed through interlibrary loan.

Walter P. Murphy Memorial Library

University of Pennsylvania
3446 Chestnut Street
Philadelphia, Pa. 19104
Telephone: 382-1907 (Area code: 215)

A reference resource for student nurses and faculty, the Library has a collection of books, journals, and reports on nursing care in medical, surgical, and clinical specialties; nursing history; ethics; and nursing administration. Reference and document services are intended primarily for student nurses and faculty. Interlibrary loan service is available.

Wistar Institute Library

University of Pennsylvania
36th and Spruce Streets
Philadelphia, Pa. 19104
Telephone: 222-6700 (Area code: 215)

Operated by the Wistar Institute of Anatomy and Biology, the Library has a collection of books and journals on virus diseases, cancer, cytology, genetics, anatomy, theoretical biology, and biological chemistry. It has a medical museum and a special collection of medical classics and Americana.

The Library is open to the public for reference use; an interlibrary loan service is available.

UNIVERSITY OF PITTSBURGH

Allegheny Observatory

Riverview Park
Pittsburgh, Pa. 15214
Telephone: 321–4607. (Area code: 412)

The Observatory conducts research on stellar distances and on radial velocities, orbits, and masses of double stars. Publications in English, Chinese, Russian, Japanese, Italian, Spanish, French, and German are acquired.

On-site use of materials and consulting and reference services are available without charge to bona fide researchers.

Graduate School of Public Health Library

University of Pittsburgh
130 DeSota Street
Pittsburgh, Pa. 15213
Telephone: 683–1620 Extension 2108 (Area code: 412)

This special library covers public health, the history of public health, industrial hygiene, industrial medicine, biostatistics, nutrition, public health adminstration, epidemiology, hospital administration, and medical care. Publications are in English, Russian, Italian, Spanish, French, and German.

Material is available to anyone for on-site reference, and photocopying services are provided. Except for certain standard reference works and rare items, holdings may be borrowed by other libraries and authorized individuals.

Health Law Center

University of Pittsburgh
130 DeSoto Street
Pittsburgh, Pa. 15213
Telephone: 683–1620 Extension 2132 (Area code: 412)

The Center maintains a collection of the statutes of Pennsylvania, New Jersey, New York, and the United States; full texts of the health statutes of several States and the Federal Government; opinions of the attorney general of Pennsylvania; health regulations of selected State agencies; and ordinances of the city of Pittsburgh, which are being put on magnetic tape for searching legal questions for practical and experimental purposes.

Upon approval, limited consulting services are offered for a fee.

UNIVERSITY OF PUERTO RICO

General Library

University of Puerto Rico
Rio Piedras, P.R.
Telephone 766–0000 (Area code: 809)

In addition to providing a general reference collection for undergraduate degree programs, the Library has graduate-level material in Hispanic studies, public administration, social work, biology, chemistry, mathematics, and physics. It serves as a depository for Office of American States and United Nations documents, reports of the U.S. Atomic Energy Commission, and maps of the U.S. Army Map Service. There are also departmental libraries in education, pharmacy, agriculture, law, and the natural sciences. Materials are collected in all major languages.

The general collection is available for direct loan; special collections are available for on-site reference use only. Photoduplication services are provided for a fee.

Institute of Marine Biology

University of Puerto Rico
Mayaguez, P.R.
Telephone: 766–0000 Extension 274 (Area code: 809)

Concerned primarily with research in oceanography, the Institute investigates systematics and ecology of marine algae of the Caribbean, coral reef ecology, systematics of marine copepods, and the marine productivity of inshore and offshore waters of Puerto Rico. A working collection of books, journals, reports, and nonprinted material is maintained in all areas of marine biology.

The holdings are available for on-site reference use; interlibrary loan services are also provided. The Institute issues conference proceedings and reprints of journal articles.

Institute of Tropical Meteorology

University of Puerto Rico
Rio Piedras, P.R.
Telephone: 766–0000 (Area code: 809)

The mission of the Institute of Tropical Meteorology is to investigate all aspects of tropical meteorology and to apply research findings to the solution of local problems. Research is supported by a library of standard reference works, a weather map file, and data archives.

Consulting services are provided to the public without charge. Research results are disseminated in technical reports.

Puerto Rico Agricultural Experiment Station

University of Puerto Rico
Rio Piedras, P.R.
Telephone: 766–1240 (Area code: 809)

Consisting of a main station near the University campus and six substations throughout the island, the Agricultural Experiment Station conducts research in the areas of agricultural economics, the animal and plant sciences, soils, agricultural engineering, and food and rum technology. Material is collected in all major languages.

Technical inquiries are answered directly by the Office of the Editor or are referred to specialists; consulting services are provided for Puerto Rican agricultural problems. There is no charge. The reference collection is accessible for on-site use.

Research results are disseminated in the *Journal of Agriculture of the University of Puerto Rico,* issued quarterly without charge to universities and colleges and to scientists. Technical reports are available free or at publishing cost. All publications of the Station are provided to libraries on an exchange basis.

UNIVERSITY OF RHODE ISLAND

Agricultural Experiment Station

University of Rhode Island
Kingston, R.I. 02881
Telephone: 789–9311 (Area code: 401)

The Station conducts research in agronomy, animal and dairy science, agricultural chemistry, agricultural economics, animal pathology, forestry, mechanized agriculture, horticulture, poultry science, plant pathology-entomology, plant physiology, and sociology. It maintains a collection of journals, reports, and data which is accessible for on-site use. Technical questions are answered and referrals made without charge.

Publications include technical reports, bulletins, and circulars. Single copies and reprints are available free on request.

Aquatic Sciences Information Retrieval Center

Computer Laboratory
University of Rhode Island
Kingston, R.I. 02881
Telephone 789–9311 Extension 701 (Area code: 401)

A mechanized information system pertaining to the biological, physical, chemical, and geological aspects of the aquatic sciences is being developed by the Center under the sponsorship of the U.S. Fish and Wildlife Service and in collaboration with the Fisheries Biology Branch of the Food and Agriculture Organization of the United Nations.

The material stored in the system consists of the information contained in *Current Bibliography for Aquatic Sciences and Fisheries,* a comprehensive serial bibliography prepared by the FAO, covering the world literature on the biology of aquatic organisms and their environments. Over 20,000 annotated references are in machine-readable form and have been indexed for mechanized retrieval. The output to users is in the form of annotated references; no publications are provided. The Center's ultimate objective is to provide a wide range of communication services for aquatic biology, including literature retrieval, on an international basis.

College of Pharmacy

University of Rhode Island
Kingston, R.I. 02881
Telephone: 789–9311 Extension 761 (Area code: 401)

The library of the College of Pharmacy covers all pharmaceutical sciences and related fields, including pharmaceutical economics. Holdings consist of books, journals, reports, patents, films, and trade literature. Russian, Italian, Spanish, French, and German sources are represented.

Materials are available without restriction for on-site use and reference service is provided.

Division of Engineering Research and Development

University of Rhode Island
Bliss Hall
Kingston, R.I. 02881
Telephone: 789–9311 Extension 689 (Area code: 401)

Established to coordinate the research activities of the College of Engineering, the Division provides facilities for research in chemical, sanitary, and structural engineering; electronics and electronic equipment, detection, and communications; soil mechanics; and metallurgy.

A library, maintained primarily for the College of Engineering faculty and graduate students, is available for on-site use. Consulting service on metallur-

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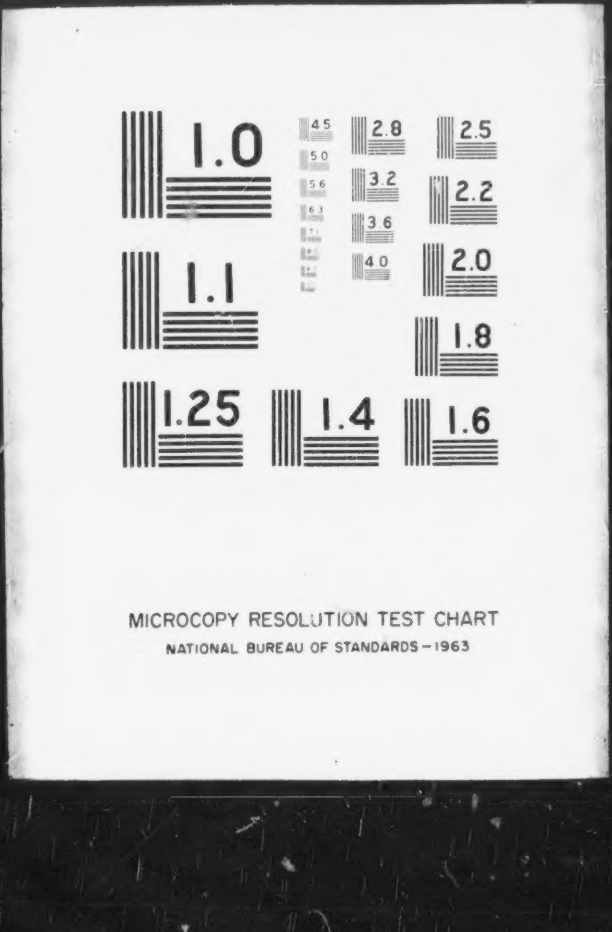
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963

gical problems of limited scope is offered gratis to local industries.

Results of original research are made available as reprints of journal articles or in engineering leaflets and bulletins published by the University.

Library

University of Rhode Island
Green Hall
Kingston, R.I. 02881
Telephone: 789-9311 (Area code: 401)

The University Library contains general collections in science and technology, as well as a large collection in the humanities and social sciences. The Library is open for on-site reference. Photocopying and interlibrary loan services are available.

Narragansett Marine Laboratory

University of Rhode Island
Graduate School of Oceanography
Kingston, R.I. 02881
Telephone: 789-9727 (Area code: 401)

The Laboratory's research program includes both basic and applied studies on biological, physical, geological, and chemical oceanography and ancillary fields and is supported by a collection of reprints and leading scientific journal literature in English, Russian, Japanese, Italian, Spanish, French, German, and Portuguese. There are extensive holdings of major and minor deep sea oceanographic expeditionary reports. Reference service is available.

UNIVERSITY OF SOUTHERN MISSISSIPPI

Library

Hattiesburg, Miss. 39401
Telephone: 266-7301 (Area code: 601)

The Library has a collection of books and journals on various scientific subjects to meet student program needs. Coverage includes chemistry, biology, botany, physics, electronics, mathematics, astronomy, astrophysics, statistics, geology, anthropology, and zoology.

Holdings are available to the public for direct reference use. Circulation of materials is restricted to students and faculty on the campus. Special consideration is given to visiting scholars and researchers. Material is also available through interlibrary loan and photocopying services.

THE UNIVERSITY OF TEXAS

Unless otherwise indicated, the University libraries are open for on-site reference to faculty and students, residents of Texas, and visiting scholars. Interlibrary loans are made and photocopies provided.

M. D. Anderson Hospital and Tumor Institute

The University of Texas
6723 Bertner Street
Houston, Tex. 77025
Telephone: 529-4311 Extension 228 (Area code: 713)

The Hospital and Institute library covers cancer, nursing, hospital administration, general works in medicine and surgery, radiology and pathology, pharmacology, anesthesiology, gynecology, anatomy, histology, cytology, chemistry, electron microscopy, biology, radiation biology, physics, biochemistry, mathematics, documentation statistics, and medical photography. Material consists largely of books, journals, and reports and is drawn from sources in English, Italian, Spanish, German, and French.

Anyone may use the collection on the premises. Interlibrary loans are made. *Articles on Neoplasms Received,* issued weekly, is free upon request.

Biology Library

The University of Texas
Austin, Tex. 78712
Telephone: 471-3811 (Area code: 512)

The holdings cover zoology, bacteriology, botany, entomology, genetics, and physiology and include publications in all major languages.

Bureau of Economic Geology

The University of Texas
Post Office Box X
18th and Red River Streets
Austin, Tex. 78712
Telephone: 471-1534 (Area code: 512)

Established to carry out the function of a State geological survey, the Bureau is engaged in a four point program of research and public service in earth science and Texas mineral resources, consisting of basic geological research; investigations of mineral deposits; systematic geologic mapping; public service mineral information, identification, and testing; and compilation of mineral statistics. A literature collection with publications in English, Russian, German, Spanish, French, and Italian is available for on-site use. The Bureau also has a well sample and core collection.

Information activities include the identification and evaluation of rock and mineral samples, literature searches, and reference and referral services. There are no fees.

Research results are published in the *University of Texas Bulletin* series; the *University of Texas Publication* series; and in the Bureau's *Report of Investigation* series, *Mineral Resource Survey* series, and *Well Record* series. Issued also are maps, guidebooks, and handbooks. A publications list is free on request.

Computation Center

The University of Texas
Austin, Tex. 78712
Telephone: 471–7242 (Area code: 512)

The Program Library of the Computation Center consists primarily of card decks and writeups of programs for the Center's computer. It also contains computer manufacturers' manuals and other information about computers, various reports on computer sciences, tables of mathematical functions, journals in computer sciences, and books with direct application to computer sciences.

Consulting and document services are limited to computer users.

Cotton Economic Research

The University of Texas
Post Office Box 8180
University Station
Austin, Tex. 78712
Telephone: 472–7501 (Area code: 512)

A part of the Cotton Research Committee of Texas, this research organization deals with the marketing, merchandising, and economic aspects of the Texas cotton industry. Areas of interest include fiber properties and chemistry of cotton and cottonseed. It collects literature in the field, generates original data, and releases reports and publications.

Some of the Library material is available for loan; other holdings are accessible for on-site use only. Publications and reports issued are obtainable without charge. A publications list is free on request.

Defense Research Laboratory

The University of Texas
Post Office Drawer 8029
500 East 24th Street
Austin, Tex. 78712
Telephone: 471–1522 (Area code: 512)

Established to conduct classified and unclassified research for U.S. Department of Defense agencies, the Laboratory performs investigations in aeronautical and space engineering, including fluid mechanics and heat transfer; radar, radio, and electronic techniques applied to instrumentalities of warfare; and pure and applied acoustics and electronics and their supporting technologies as applied to devices, tactics, and procedures for undersea and air warfare.

In some cases, availability of information requires need-to-know. The Laboratory issues its findings in bimonthly and quarterly reports; looseleaf data handbooks are also published at irregular intervals.

Dental Branch Library

The University of Texas
6516 John Freeman Avenue
Houston, Tex. 77025
Telephone: 528–4871 Extension 217 (Area code: 713)

In addition to material on dentistry, including a special collection on the history of dentistry, this library contains limited holdings in general medicine. Journals in English, Spanish, French, German, Norwegian, and Portuguese are acquired. Material is available on loan to responsible individuals and organizations.

Engineering Library

The University of Texas
Austin, Tex. 78712
Telephone: 471–1610 (Area code: 512)

The collection consists of books and journals on aerospace, architectural, chemical, civil, electrical, mechanical, meteorological, and petroleum engineering.

Geology Library

The University of Texas
Austin, Tex. 78712
Telephone: 471–3811 (Area code: 512)

Subjects covered are geophysics, glaciology, meteorology, mineralogy, paleontology, petroleum geology, seismology, and volcanology. Geologic and topographic maps are acquired and there are special collections on mesozoic and micropaleontology. Sources are in English, French, Italian, Russian, German, and Spanish.

Institute of Marine Science

The University of Texas
Port Aransas, Tex. 78373
Telephone: 749–5550 (Area code: 512)

The Institute has a library on marine science with a collection of reprints, many relating to the Gulf of Mexico area. The books, journals, reports, and nonprinted material acquired include sources in Russian, French, Spanish, German, Italian, and Japanese.

The collections are open for on-site use. *Publications of the Institute of Marine Science,* issued annually in one volume, is for sale or exchange.

J. W. Mallet Chemical Library

The University of Texas
Chemistry Building 219
Austin, Tex. 78712
Telephone: 471–1303 (Area code: 512)

The Library acquires books, journals, and U.S. Atomic Energy Commission reports dealing with chemistry, biochemistry, and chemical engineering. Foreign publications are in French and German.

Military Physics Research Laboratory

Post Office Box R, University Station
Austin, Tex. 78712
Telephone: 465–6501 (Area code: 512)

The Laboratory carries out Government-sponsored basic and applied research in physics, applied mathematics, exterior ballistics, instrumentation design and development; and aerodynamic and space systems testing and evaluation. Release of information either through consultation or published data is subject to approval of the sponsoring agency on the basis of need-to-know.

Pharmacy Library

The University of Texas
Austin, Tex. 78712
Telephone: 471–3811 (Area code: 512)

Subject areas covered are pharmacology, pharmacognosy, perfumery, and cosmetics. Books and journals are acquired in all major languages.

Physics Library

The University of Texas
Austin, Tex. 78712
Telephone: 471–3811 (Area code: 512)

The Library provides coverage in all areas of astronomy and physics and consists of books and journals in all major languages.

Southwestern Medical School Library

The University of Texas
5323 Harry Hines Boulevard
Dallas, Tex. 75235
Telephone: 631–3220 Extension 369 (Area code: 214)

Limited to physicians, medical students, and qualified medical personnel in the Dallas area, the Library provides coverage in medicine and related fields, including biological sciences and biochemistry. Material consists of books, journals, reports, and microcards and includes sources in Russian, Italian, Spanish, French, and German.

A *List of Serials* is published annually and a *List of New Acquisitions* monthly.

Structural Mechanics Research Laboratory

The University of Texas
Balcones Research Center
Box 189, Route 4
Austin, Tex. 78758
Telephone: 465–6501 (Area code: 512)

Research conducted at the Laboratory is concerned mainly with engineering properties of materials, the effects of rate of loading on these properties, and the responses of structures to impact loading. Projects are undertaken under contract or educational grants. Theses and reports are published.

Texas Petroleum Research Committee

The University of Texas
Austin, Tex. 78712
Telephone: 471–7247 (Area code: 512)

The Committee's research program is aimed at increased recovery of petroleum from underground reservoirs, with particular emphasis on the oil reserves of the State of Texas. Investigations include laboratory analyses, theoretical studies, and literature searches. Some materials are available at a specific fee; others are provided without charge when in supply.

UNIVERSITY OF TOLEDO

Library

2801 West Bancroft Street
Toledo, Ohio 43612
Telephone: 531–1451 (Area code: 419)

With a general collection in the arts, sciences, and technology, the Library provides subject coverage for undergraduate and graduate degree programs. There are special collections in social hygiene, welding, aeronautics, law, and local history. The Library is a depository for U.S. Atomic Energy Commission reports and for maps issued by the U.S. Army Map Service, the U.S. Coast and Geodetic Survey, and the U.S. Geological Survey. It also houses material on silicate science, covering ceramics, physical-chemical properties of silicates, crystallography and structure of silicates, and mineralogy, geology, and geochemistry of silicate systems. Languages represented are English, Russian, Spanish, French, and German.

All resources are available to the public for on-site reference use. Direct loan privileges other than to students or faculty are extended on an individual basis. Material may be borrowed on interlibrary loan. Photoduplication services are provided for a charge. The Library will place orders for microfilms and photocopies of material located in libraries throughout the world; costs must be borne by the individual placing the order.

UNIVERSITY OF TULSA

Information Services Department

University of Tulsa
1136 North Lewis Street
Tulsa, Okla. 64110
Telephone: 939-6351 Extension 296 or 297 (Area code: 918)

The Department prepares *Petroleum Abstracts* with world coverage of pertinent technical literature and patents relating to finding and producing crude oil, natural gas, and other hydrocarbons. Fields dealt with are geology, geochemistry, geophysics, drilling, well logging, well completion and servicing, production of oil and gas, reservoir studies, and supplemental technology. Sources used are in English, Russian, Italian, Spanish, French, German, Portuguese, Japanese, Dutch, Rumanian, and Polish.

Abstracts are issued weekly in journal and card form and may be obtained by subscription. Beginning January 1965, the cards will be discontinued and replaced by machine-based indexes and magnetic tapes. The Department's card files of over 400,000 cards are used to perform technical information searches.

Sidney Born Technical Library

University of Tulsa
1136 North Lewis Street
Tulsa, Okla. 64110
Telephone: 939-6351 (Area code: 918)

This specialized library has a collection of books, journals, reports, patents, and maps on petroleum, mechanical, chemical, and aeronautical engineering and geology. Sources in English, Russian, Italian, Spanish, French, and German are acquired. The Library houses most of the material abstracted by *Petroleum Abstracts.*

Home use of material is restricted to faculty and students of the University of Tulsa and residents of the city of Tulsa. The collection is available to others for on-site use or may be borrowed through interlibrary loan.

UNIVERSITY OF VERMONT

Bailey Memorial Library

University of Vermont
Burlington, Vt. 05401
Telephone: 864-4511 Extension 307 (Area code: 802)

The Library houses a working collection of books, manuscripts, and journals in science and technology, agriculture, medicine, and Vermontiana. Literature in all major languages is represented.

On-site reference use of material is permitted and interlibrary loans made. Copying and microfilm reading facilities are available. Direct loans are available only to students and faculty.

Pringle Herbarium

University of Vermont
Burlington, Vt. 05401
Telephone: 864-4511 Extension 328 (Area code: 802)

The plant collection consists of specimens from all parts of the world, with emphasis on New England flora and the Mexican collections of Cyrus G. Pringle. The collections are available for on-site reference or for loan to recognized scientists and institutions.

Vermont Agricultural Experiment Station

University of Vermont
Burlington, Vt. 05401
Telephone: 864-4511 Extension 256 (Area code: 802)

Projects carried out by the Station include research in the physical, biological, and social sciences as they relate to agriculture and rural, social, and economic life. Conferences are sponsored annually. Free consulting service is provided.

The Station publishes *Vermont Farm and Home Science.*

UNIVERSITY OF WASHINGTON

Applied Physics Laboratory

University of Washington
1013 Northeast 40th Street
Seattle, Wash. 98105
Telephone: 543–1300 (Area code: 206)

A library collection is maintained by the Laboratory in support of Government-sponsored research in physics, oceanography, underwater acoustics, and antisubmarine warfare. Books and journals are available for on-site reference; technical reports and research data are provided to Government agencies and contractors through the Bureau of Naval Weapons (RUTO–3), U.S. Department of the Navy, Washington, D.C.

Computer Center

University of Washington
160 Computer Center Building
Seattle, Wash. 98105
Telephone: 543–5970 (Area code: 206)

The Center provides computer service for a fee in support of University research and to outside research groups in the Pacific Northwest.

Drug Plant Garden and Laboratories

University of Washington
College of Pharmacy
102 Bagley Hall
Seattle, Wash. 98105
Telephone: 533–2030 (Area code: 206)

The Laboratories' medicinal drug and seed collection serves as a teaching aid for students in pharmacy and pharmacognosy. A seed exchange program is maintained with botanical and medicinal plant gardens throughout the world, and available seeds are supplied to legitimate researchers. Acknowledgement is requested in any publication resulting from study of materials supplied. Subject to time and staff limitations, the Laboratories will provide information in response to individual requests regarding medicinal plants or their properties.

Index Semimum, Plantarum Medicinalium, an annual publication, is available without charge.

Environmental Health Division

University of Washington
E–313 Health Sciences Building
Seattle, Wash. 98105
Telephone: 533–4030 (Area code: 206)

A part of the Department of Preventive Medicine, the Division functions as an information center on industrial hygiene engineering and chemistry, occupational medicine, experimental industrial toxicology, and air pollution and maintains a literature collection in these areas. Reference and consulting services are available to anyone without charge.

The monthly *Occupational Health Newsletter* and technical reports issued by the Division are free on request.

Friday Harbor Laboratories

University of Washington
201 Johnson Hall
Friday Harbor, Wash. 98222
Telephone: 378–3465 (Area code: 206)

The Laboratories sponsor symposia and conduct studies in the marine sciences, with emphasis on marine biology. Areas of interest include experimental and comparative embryology, modern systematics and speciation, comparative endocrinology, ecology, and morphology. A library collection is available for on-site use.

Laboratory of Radiation Biology

University of Washington
Fisheries Center
Seattle, Wash. 98105
Telephone: 543–4267 (Area code: 206)

Under the sponsorship of the U.S. Atomic Energy Commission, the Laboratory conducts studies of the biological disposition and effects of radioactivity in the natural environment, particularly in the aquatic environment, and studies of the uses of radioisotopes to increase production in lakes and streams. Geographic areas covered include the central and western Pacific Ocean, Alaska, and the Columbia River. Published materials, maps, and slides are available for on-site reference.

Research findings are disseminated in technical reports, many of which may be obtained by the public through the Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20234. Some reports are published in scientific journals; others are provided by the Laboratory on request.

Nuclear Reactor Laboratories

University of Washington
Seattle, Wash. 98105
Telephone: 543–4170 (Area code: 206)

The Laboratories perform research in neutron physics, reactor dynamics, radiation shielding, devices for neutron spectrum measurements, and cold neutron physics. Complete activation analysis services are available; fees are charged for irradiation services.

Pacific Northwest Bibliographic Center

University of Washington Library
Seattle, Wash. 98105
Telephone: 543–1878 (Area code: 206)

A union catalog of regional holdings in all fields of science and technology is maintained by the Center, which furnishes locations for interlibrary loan requests and forwards such requests to a holding library. Service is ordinarily restricted to member libraries in the region; cooperative arrangements are maintained with the Library of Congress and certain other institutions outside the region. No mail service is given to individuals, only to libraries.

University Library

University of Washington
Seattle, Wash. 98105
Telephone: 543–1760 (Area code: 206)

The University Library and its branches provide coverage in all general fields of university scientific study, including medicine, dentistry, chemistry, engineering, fisheries, oceanography, forestry, mathematics, physics, and pharmacy. Reference services are provided, and the Library is a depository for technical reports issued by Government agencies.

UNIVERSITY OF WYOMING

Agricultural Experiment Station

University of Wyoming
Post Office Box 3354
Laramie, Wyo. 82071
Telephone: 745–8511 Extension 251 (Area code: 307)

Experiments in all phases of agriculture and home economics are conducted by the Station, including research in agricultural biochemistry, physiology, and nutrition, animal and plant science, veterinary science, dairy and beef cattle, sheep and wool production, poultry, swine, animal breeding, crops, weed control, entomology, plant pathology, horticulture, forestry, range management, soils, agricultural economics and marketing, farm and ranch management, and extension programs. Technical inquiries are answered and bibliographic references provided. In some cases, referrals are made to other organizations or individuals. Both in-State and out-of-State inquiries are handled without charge, as time permits.

Jackson Hole Biological Research Station

University of Wyoming
Box 3166, University Station
Laramie, Wyo.
Telephone: 745–5792 (Area code: 307)

The Jackson Hole Biological Research Station provides a library and laboratories for summer investigations in field ecology, life history of invertebrate and vertebrate animals, plant and animal taxonomy, behavior and social organization, range and game management, conservation, and fisheries biology. In addition to a basic biological reference collection, the Station has a herbarium and a collection of mammals and birds.

The research facilities are available to investigators conducting a project approved by the Station. Research projects are sponsored by universities, the New York Zoological Society, Federal grants, national societies, and private individuals. The Station disseminates information without charge to anyone with scientific interest. An annual report providing a summary of research projects and a list of journal articles prepared by investigators is available on request.

Natural Resources Research Institute

University of Wyoming
Box 3038, University Station
Laramie, Wyo. 82071
Telephone: 745–3726 (Area code: 307)

Through projects sponsored by the State, the U.S. Government and industry, the Institute provides facilities for research by University staff and graduate students on the material resources of Wyoming, specifically on coal and mineral utilization, water resources, weather modification, and air and space operations. Publications available free on request include circulars and technical reports.

Rocky Mountain Herbarium

University of Wyoming
Laramie, Wyo. 82071
Telephone: 745–8511 Extension 432 (Area code: 307)

Consisting of over 274,000 plant specimens, the

Herbarium serves as a source of information on the flora of the Rocky Mountain region in general and of Wyoming in particular. It aids in the identification of plants submitted by ranchers, county agents, institutions, and Federal agencies throughout the region, and serves as a source of research and teaching material in the field of systematic botany. The Herbarium contains all the known flowering plants of Wyoming and is becoming equally complete for the whole Rocky Mountain region. Emphasis is on plants of arctic and alpine regions. The collection is also noted for its specimens of forage and range plants and of stock-poisoning plants.

The Herbarium is open to qualified botanical experts, graduate students, and others whose previous training is such that they can profit by its use. There is no charge other than shipping cost for the identification of plants or the loan of specimens. Duplicate sets of plants should be sent for verification or naming. Correspondence is solicited from persons who have, or will collect, plants for exchange.

University Library

University of Wyoming
Box 3334, University Station
Laramie, Wyo. 82071
Telephone: 745-8511 (Area code: 307)

The Library consists of a main library and branches with collections in botany, chemistry, zoology, adult education, pharmacy, and law. There are special collections in geology, petroleum history, wool, and the history of the West. Foreign publications are in English, Russian, Italian, Spanish, French, and German.

No restrictions are imposed on the use of the Library and its services; photocopies are provided for a per page fee, and reference questions are answered.

THE UPJOHN CO.

Technical Library

Henrietta Street
Kalamazoo, Mich. 49006
Telephone: 345-3571 Extension 7089 (Area code: 616)

Pharmaceutical, medical, and chemical information activities of the Upjohn Co. are centered in its Library. Foreign and domestic publications in English, Russian, Italian, French, Spanish, and German are acquired and processed.

Access to the collection for on-site use by non-Company personnel is permitted with clearance from the Head Librarian. Loans and photocopies of material may be secured through the usual interlibrary loan channels.

VA CANCER REGISTRY, *See* U.S. VETERANS' ADMINISTRATION

VELA SEISMIC INFORMATION ANALYSIS CENTER, *See* UNIVERSITY OF MICHIGAN

VICCARS SEED LABORATORY

2123 Mt. Meigs Road
Montgomery, Ala. 36107

A member of the Society of Commercial Seed Technologists, Viccars is a quality testing laboratory, which maintains a reference collection of crop and weed seeds. It attempts to identify plants or seeds on request, and provides data on purity and germination of seed crops grown in the Southeastern States submitted for testing. Tests are made on a fee basis. The Laboratory serves seedmen of the southeastern United States, particularly Alabama.

VIRGINIA CAROLINA CHEMICAL CO., *See* SOCONY MOBIL OIL CO., INC.

VIRGINIA INSTITUTE FOR SCIENTIFIC RESEARCH

6300 River Road
Richmond, Va. 23226
Telephone: 282-9581 (Area code: 703)

A nonprofit research organization, the Institute maintains a library of books, journals, reports, data, and films and photos on solid state physics and chemistry, surface chemistry and corrosion, biochemistry of proteins and tobacco, and crystallography. General reference works on inorganic and organic chemistry, biochemistry, the formation of single crystals, thin films of metals, and physics are included in the collection. Sources in English, Russian, Italian, Spanish, French, and German are represented.

The library is open to the public, but books and journal loans are provided only through recognized libraries. The Institute's research findings are published in the form of technical reports.

WARNER-LAMBERT PHARMACEUTICAL CO.

Warner Lambert Research Institute

170 Tabor Road
Morris Plains, N.J.
Telephone: 539–4400 (Area code: 201)

The Institute performs research on drugs, medicine, chemistry, pharmacology, pharmaceutical technology, biology, and microbiology. Books, journals, patents, films, and photos on these subjects are maintained in the Institute's library. English, Russian, Italian, Spanish, French, and German sources are represented. A special card file on new drugs contains over 40,000 items and includes the composition, manufacturer, therapeutic activity, literature citations, and chemical structure of single entities where feasible.

Literature searches are performed, technical questions answered, and scientific data compilations made for Company personnel and Morris County physicians. Members of the Special Libraries Association may use the library freely; others must make advance arrangements.

WATER INFORMATION CENTER, INC.

44 Sintsink Drive
Port Washington, N.Y. 11050
Telephone: 767–5981 (Area code: 516)

A commercial information clearinghouse for the water and sewage industries, the Center reviews published and unpublished information on water supply, waste disposal, and conservation. A collection of books, journals, reports, maps, and data is maintained in the following areas: water resources, waste disposal, conservation, water purification, water utilization, artificial rainmaking, desalination, water supply, fluorination, water pollution, aquatic science, hydrology, irrigation, water reclamation, and sewage. There are no geographic limitations on subject coverage.

The Center answers technical questions without charge, prepares special studies for individual clients, and provides consulting services on a fee basis. The collection is available for direct use by approved visitors.

Information is disseminated mainly through publications, which are available to anyone on subscription or for purchase. They include *Water Newsletter,* issued 24 times a year, and the supplemental *Research and Development News,* issued 12 times a year; *Water Atlas of the United States* with accompanying text; and special reports on current problems. Selected lists of books about water are sent free on request.

WATER POLLUTION CONTROL FEDERATION

3900 Wisconsin Avenue NW.
Washington, D.C. 20016
Telephone: 362–4100 (Area code: 202)

The Federation is a nonprofit technical organization concerned with all aspects of water pollution control through the proper collection and treatment of domestic and industrial waste water, and with the planning, design, construction, and operation of control facilities. Technical questions are answered, and a collection of books, journals, reports, data, and nonprinted material is available for on-site reference.

Publications include the monthly *Journal of the Water Pollution Control Federation,* obtainable on subscription, technical reports, and state-of-the-art reviews.

WATER RESOURCES CENTER ARCHIVES, *See* UNIVERSITY OF CALIFORNIA, BERKELEY

WAYNE STATE UNIVERSITY

Center for Application of Science and Technology

Wayne State University
Detroit, Mich. 48202
Telephone: 833–1400 Extension 7332 (Area code: 313)

Sponsored by the National Aeronautics and Space Administration, the State of Michigan, and various industrial groups, the Center's primary purpose is to supply industry in the Detroit area with technical information from NASA programs which may have potential commercial applications. Information is gained from an analysis of NASA documents and patents and personal contacts with NASA personnel. The Center maintains a complete collection of NASA unclassified material that is available on microfiche, as well as reports, briefs, translations, reprints, and machine tape from NASA's Scientific and Technical Information Facility.

An information storage and retrieval system has the capability of matching industry's technical areas of interest with NASA's research results and printing out report bibliographies on demand. Technical inquiries are answered and pertinent literature is disseminated in response to requests for specific information. The collection is available for on-site use.

WEATHER BUREAU, *See* U.S. DEPARTMENT OF COMMERCE

WEATHER RADAR RESEACH PROJECT, *See* MASSACHUSETTS INSTITUTE OF TECHNOLOGY

WELDING RESEARCH COUNCIL

345 East 47th Street
New York, N.Y. 10017
Telephone: 752-6800 (Area code: 212)

The Welding Research Council was organized in 1935 by the Engineering Foundation with the sponsorship of the American Welding Society, the American Institute of Electrical Engineers, the American Institute of Mining and Metallurgical Engineers, the American Society of Civil Engineers, the American Society of Mechanical Engineers, and the Society of Naval Architects and Marine Engineers to provide a mechanism for the initiation, conduct, and promotion of needed scientific research in welding and allied fields and for the dissemination of research information. It encourages cooperative research among its members both in the United States and abroad toward the solution of complex problems. Services are designed exclusively for sponsor organizations and their members.

Affiliated research findings are disseminated in five regular publications available only to member subscribers: the monthly *Reports of Progress, Welding Research,* and *Welding Research Abroad;* the bimonthly *Welding Research News;* and *Bulletins* issued at irregular intervals. Membership is open to scientific and technical societies, Government departments, trade associations, and companies fabricating and using welded products. Subscription fees depend on size and interest in the field.

WENNER-GREN AERONAUTICAL RESEARCH LABORATORY, *See* UNIVERSITY OF KENTUCKY

WESTERN PINE ASSOCIATION

510 Yeon Building
522 Southwest Fifth Avenue
Portland, Oreg. 97204
Telephone: 228-8376 (Area code: 503)

A national trade organization for lumber producers, the Western Pine Association provides information on western pine region lumber; supervises grading; investigates technical problems associated with milling, seasoning, marketing, distribution, and quality control; and compiles statistics on the production and sale of lumber. It operates a laboratory which works mostly on projects which improve the products of member mills. It has a forest conservation department which assists members with their growing, protection, and purchase of timber supplies.

Technical questions are answered directly by the Association's information service or by laboratory specialists. Consulting, reference, and document services are provided without charge to all serious inquirers.

Weekly and monthly statistical reports, including a quarterly statistical summary, are available free to cooperating mills, other lumber associations, and the trade press; they may be obtained by others on yearly subscription. Other publications available for sale are technical manuals, data handbooks, and directories. *Publications File,* a listing of free public publications and those for sale, is provided free on request.

WESTERN RESERVE UNIVERSITY

Center for Documentation and Communication Research

Western Reserve University
10831 Magnolia Drive
Cleveland, Ohio 44106
Telephone: 231-7700 (Area code: 216)

The Center for Documentation and Communication Research at Western Reserve University is part of the School of Library Science. The purpose of the Center's research is both to add to the knowledge of the field and to provide a training environment for librarians and information scientists. Research is carried on in retrieval system and subsystem design specifications, including the development and evaluation of analysis, indexing, coding, and searching techniques using both mechanized and nonmechanized procedures. Subject areas include social sciences, specifically educational research literature; health sciences; and physical sciences. Another area of interest is automation of library procedures, including the computer production of bibliographies. The Comparative Systems Laboratory in the health sciences, sponsored by the National Institutes of Health, provides an arena for interdisciplinary investigations and applications of testing procedures.

Inquiries about special projects utilizing Center facilities or personnel should be addressed to the Director.

Freiberger Library

Western Reserve University
11161 East Boulevard
Cleveland, Ohio 44106
Telephone: 231–7700 (Area code: 216)

The Freiberger Library has collections of books, journals, reports, and films in all areas of study, teaching, and research offered by the University. Material is collected in every major language. Branch libraries are maintained in applied social sciences, biology, chemistry, dentistry, law, library science, physics, medicine, and nursing.

Reference and document services are provided to those affiliated with the University; others are permitted on-site use.

WESTINGHOUSE ELECTRIC CORP.

Engineering Library

Mail:
Post Office Box 284
Elmira, N.Y. 14902

Location:
Horseheads Junction
Horseheads, N.Y.
Telephone: 739–3611 Extension 207 (Area code: 607)

The Library contains materials on electron tubes; receiving tubes; klystrons; magnetrons; switch tubes; camera tubes; orthicons; vidicons; storage intensifier and transmitting tubes; neutron counters; metals, glass, ceramics, and chemicals in tubes; optical emission and X-ray spectroscopy; optical microscopy; and X-ray diffraction. The holdings consist of books, journals, reports, films, and photos.

The Library is not open to the general public. Those outside the Corporation having a definite need to use the Library's materials may do so by prior appointment on-site only. Interlibrary loan and photocopying services are not available.

Technical Information Center

Defense and Space Center
Post Office Box 1693
Friendship International Airport
Baltimore, Md. 21203
Telephone: 761–1000 Extension 2858 (Area code: 301)

The activities of the Technical Information Center are designed to support research and development of electronic systems and components. The Center acquires, searches and scans, and indexes books, journals, reports, and data in English, Russian, Italian, Spanish, French, and German.

The collection is not open to the public, but interlibrary loans are made, subject to Company needs. Requests for internal reports are subject to need-to-know and approval by contract officers.

Westinghouse Atomic Power Division

Post Office Box 355
Forest Hills
Pittsburgh, Pa. 15230
Telephone: 391–2800 Extension C246 (Area code: 412)

Informational support is provided by the Division's Technical Information Center, which maintains a library on atomic energy, including commercial aspects, atomic power plants, nuclear science and engineering, mathematics, physics, and chemistry. The collection includes AEC reports and legislation, and hearings of the Joint Committee on Atomic Energy. Material is in English, Russian, Italian, Spanish, French, and German. Service to outsiders is limited, but interlibrary loans are made.

Westinghouse Research and Development Center

Beulah Road, Churchill Borough
Pittsburgh, Pa. 15235
Telephone: 242–1500 Extension 463 and 464 (Area code: 412)

The Center's Research Library deals with computer electronics; computer sciences; cryogenics; electroacoustics; electromechanics; electron beam phenomena; energy conversion; high-voltage phenomena; insulation and dielectric studies; magnetics; mass spectroscopy; mathematical statistics; bearings; lubrication science; stress analysis; vibration phenomena; wear; corrosion phenomena and mechanical properties as related to metals and ceramics; molecular electronics; Mossbauer effect studies; nuclear radiation research; physics of ionized gases; sensor devices; solid state chemistry, specifically thin films and surface phenomena; solid state physics, including circuits, lasers, masers, and semiconductors; thermoelectrics; upper atmosphere research; vacuum research; welding phenomena; and X-ray technology. Source materials are in English, Russian, Italian, Spanish, French, and German.

The collection is not open to the public; interlibrary loans are made only in exceptional cases.

WEST VIRGINIA UNIVERSITY

Agriculture-Engineering Library

West Virginia University
Morgantown, W. Va.
Telephone: 542–6363 Extension 397 (Area code: 304)

In support of agricultural and engineering research, the Library provides subject coverage in the areospace sciences; chemical, civil, electrical, industrial, mechanical, and agricultural engineering; plant pathology; and home economics. Holdings include books and journals, AEC and NASA reports, and reports from the agricultural experiment stations in the State.

On-site reference and borrowing privileges are extended to students and faculty of the University and to State residents. A fee is charged for postage on items mailed to noncampus users. Photocopying services are available through the University's General Library.

Bureau of Coal Research

West Virginia University
Morgantown, W. Va.
Telephone: 549–3411 Extension 790 (Area code: 304)

Operated by the School of Mines, the Bureau of Coal Research conducts investigations for the purpose of increasing the uses and markets for West Virginia coals. Studies include coal carbonization, desulfurization, form-coke, form-coal, benefaction of coal-associated minerals, bench-scale gasification, and coal pipe lining. A report collection is maintained in the above areas.

The Bureau answers technical questions, provides consultations, and disseminates research findings in reports, issued irregularly.

Engineering Experiment Station

West Virginia University
Morgantown, W. Va.
Telephone: 549–3411 Extension 352 (Area code: 304)

The Engineering Experiment Station coordinates the University's programs of research in the areas of aerospace, agricultural, chemical, civil, electrical, mechanical, and industrial engineering and theoretical and applied mechanics. Technical questions are answered and consulting services are available. Research findings are disseminated in technical reports, issued irregularly.

General Library

West Virginia University
Morgantown, W. Va.
Telephone: 549–3411 Extension 485 (Area code: 304)

A reference source for courses of instruction and research, the Library provides coverage in the physical, natural, and social sciences; arts and humanities; law; and the medical sciences. Holdings include books, journals, Government documents, and technical reports. The Library is a depository for U.S. Atomic Energy Commission reports. There is a special collection of West Virginia historical material, consisting of manuscripts, papers, and records.

The collections are accessible for on-site reference use. Material may be borrowed on interlibrary loan. A monthly accessions list is available without charge to other libraries on request.

Herbarium

West Virginia University
Morgantown, W. Va.
Telephone: 549–3411 Extension 590 (Area code: 304)

Operated by the Department of Biology, the Herbarium maintains a collection of plant specimens and a library of books, journals, reports, kodaslides, photographs, and data on various botanical subjects, chiefly taxonomy. It makes plant identifications, answers technical inquiries, and provides consulting services without charge to the general public. Specimens are available for loan to qualified researchers. A report series, *Contributions from the Herbarium,* issued irregularly, is available on request.

Mathematics-Physics Research Library

West Virginia University
Physics Building
Morgantown, W. Va.
Telephone: 549–3411 Extension 656 (Area code: 304)

Devoted to advanced mathematics and physics, the Library collects material on magnetic phenomena, quantum theory, number theory, geometry, combinatorial analysis, and special functions. Holdings include journals from Germany, England, France, and Italy. The collection is accessible for on-site reference use; material may be borrowed on interlibrary loan. Photocopying services are provided through the General Library.

West Virginia Agricultural Experiment Station

West Virginia University
Morgantown, W. Va.
Telephone: 542–6363 Extension 305 (Area code: 304)

Consisting of a laboratory and four field stations, the Station conducts research and disseminates information on various aspects of agriculture and forestry as applied to West Virginia and the Appalachian area. Literature and data are collected on agronomy; weed control; soil sciences; animal husbandry and poultry; clinical and experimental pathology; animal and plant genetics; bacteriology; biochemistry; forestry; fish and wildlife; entomology, including pests and disease transmission; horticulture; phytopathology; nutrition; and agricultural engineering.

Technical inquiries are answered directly or referred to specialists; consulting services are provided for State agricultural problems. There is no charge. Library holdings are accessible for on-site reference.

Information is also disseminated by means of publications. The Agricultural Experiment Station prepares technical reports, conference proceedings, data handbooks, and scientific articles. A periodical, *Science Serves Your Farm and Home,* is issued quarterly. Single copies of publications are available without charge or at publishing cost; they are provided to libraries on an exchange basis.

S. S. WHITE DENTAL MANUFACTURING CO.

211 South 12th Street
Philadelphia, Pa.
Telephone: 923–1621 (Area code: 215)

The Company maintains a library of books, journals, and patents on the manufacture of dentists' equipment and dental prosthetic devices. It also has a collection of dental journals from 1860 to date and rare books issued prior to 1900 on dental subjects. Publications are in English, Spanish, French, and German. On-site reference is permitted.

WILDLIFE MANAGEMENT INSTITUTE

709 Wire Building
1000 Vermont Avenue NW.
Washington, D.C. 20005
Telephone: 347–1774 (Area code: 202)

A national volunteer conservation association, the Institute collaborates with the U.S. Soil Conservation Service and U.S. Fish and Wildlife Service, State conservation departments, the American Association for Conservation Information, and other organizations. It conducts surveys of laws, programs, and procedures of State conservation departments. Field representatives in Connecticut, Wisconsin, Georgia, Arkansas, and Oregon maintain liaison between private, State, and Federal agencies.

The Institute disseminates information on wildlife management, conservation, biology, natural resources, and pertinent legislation. It has a small working library on these subjects, which may be consulted on the premises. Technical questions are answered and consultations provided. On specific problems, inquirers are directed to individual experts.

Publications issued include the annual *Transactions of North American Wildlife and Natural Resources Conferences* and the biweekly *Outdoor News Bulletin.* A list of other printed material is available on request.

WINZEN RESEARCH, INC.

8401 Lyndale Avenue, South
Minneapolis, Minn. 55420
Telephone: 881–5871 (Area code: 612)

The company is engaged in the design, development, and manufacture of plastic balloons for upper atmosphere and astronomical research; manned and unmanned gondolas; electronic equipment for instrumentation, telemetry, and communications in balloon flight operations; plastic packaging and coverings for commercial applications; and manned and unmanned ballon flight operations on a worldwide basis.

Material is proprietary and is distributed only to Government and civilian agencies interested in this specific field. Reports prepared under Government contract can be released only with the consent of the contracting agency.

WISTAR INSTITUTE LIBRARY, *See* UNIVERSITY OF PENNSYLVANIA

WOODS HOLE OCEANOGRAPHIC INSTITUTION

Document Library LO–206
Woods Hole, Mass. 02543
Telephone: 548–1400 Extension 269 (Area code: 617)

All aspects of oceanography, including instrumentation, marine meteorology, geology, and geophysics are covered in the report collection of the WHOI Document Library. Unclassified WHOI reports are available for loan or retention to bona fide members of the scientific and educational community. Material from other sources is available for on-site reference to users introduced by staff members or persons having U.S. Department of Defense directives.

The Document Library distributes a monthly accession bulletin, *Documents Received in the Reference Room,* which is available on request.

WORLD DATA CENTER A, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

WORLD DATA CENTER A: AURORA, *See* UNIVERSITY OF ALASKA

WORLD DATA CENTER A FOR ROCKETS AND SATELLITES, *See* NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

WORLD DATA CENTER A: SOLAR ACTIVITY, *See* NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

WYANDOTTE CHEMICALS CORP..

Research Library and Technical Information

Wyandotte, Mich.
Telephone: 382–6000 (Area code: 313)

The literature collection provides coverage in the chemistry and chemical engineering of inorganic and organic chemicals, such as chloralkalies, calcium carbonate, glycols, alkylene, oxides, polyethers, polyurethanes and other polymeric materials, and cleaning compounds. Foreign-language materials are in Russian, Italian, Spanish, French, and German.

Special permission has to be obtained by noncorporate personnel for on-site use of the collection.

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Index

The subject headings used in the index are drawn directly from the descriptive text, and each resource has been entered under the several subjects reported in the description of that resource in order to provide multiple avenues of approach.

Some consolidation has, of course, been necessary, and cross references have been introduced for two purposes: to guide the reader from a term as reported by a resource to the related heading under which that resource is listed, and to indicate specific subjects within a general category. Cross references have not been made from the specific to the general, since to do so would require assumptions which might not have validity for the user.

The full names of the resources given under each subject heading will, it is hoped, aid the reader in preliminary selection of the organizations of interest to him.

It should be noted that a few resources whose broad scope does not allow for a breakdown that would do justice to their varied interests are listed under the heading of *Science and Technology.*

Abrasives
- Carborundum Co., 49
- Minnesota Mining and Manufacturing Co. Abrasives Library, 109

Accelerators, *see* Particle Accelerators

Accident Prevention, *see* Safety Engineering

Acoustical Materials
- American Society for Testing and Materials, 26
- Southern Methodist University. Acoustics Laboratory, 171

Acoustics
- American Industrial Hygiene Association, 16
- American Museum of Natural History, 19
- Bolt, Beranek & Newman, Inc., 44
- Carrier Research and Development Co. Logan Lewis Library, 50
- Federal Aviation Agency. Headquarters Library, 68
- The National Academy of Sciences—National Research Council. NAS-NRC Committee on Hearing, Bioacoustics, and Biomechanics, 122
- Ohio State University. Electrical Engineering Library, 144
- Raytheon Co. Submarine Signal Operations Library, 158
- Southern Methodist University. Acoustics Laboratory, 171
- U.S. Department of the Treausry. U.S. Coast Guard. Office of Engineering, 227
- University of Michigan:
  - Museum of Zoology, 250
  - Science and Engineering Library, 250
- The University of Texas. Defense Research Laboratary, 264

Acoustics—Continued
- University of Washington. Applied Physics Laboratory, 267
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
- *See also* Pyschoacoustics

Adhesives
- Adhesive Products Corp., 1
- American Society for Testing and Materials, 26
- Forest Products Research Society, 70
- Franklin Institute. Laboratories for Research and Development, 70
- General Mills, Inc. Central Research Libraries, 73
- Karl M. Fox Consulting Research Service and Library, 93
- Minnesota Mining and Manufacturing, Co. Abrasives Library, 109
- National Gallery of Art. Research Laboratory, 132
- Stein Engineering Services, Inc., 174
- U.S. Department of the Treasury. Bureau of Engraving and Printing, 226
- University of Dayton. Research Institute, 242

Aerial Photography
- U.S. Department of Commerce. Coast and Geodetic Survey. Office of Physical Sciences, 190
- U.S. Department of the Interior. Geological Survey. Map Information Office, 222

Aerial Recovery
- All American Engineering Co., 4

Aerodynamics
- American Astronautical Society, 7
- Avco Corp.:
  - Avco-Everett Research Laboratory, 36
  - Technical Communications Department, 37

Aerodynamics—Continued
- The Boeing Co. Boeing Scientific Research Laboratories, 44
- Federal Aviation Agency:
  - Aeronautical Center Library Service, 67
  - Headquarters Library, 68
  - National Aviation Facilities Experimental Center, 68
- Fitz Patrick Co., 69
- Fluidyne Engineering Corp., 69
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- Purdue University. Jet Propulsion Center, 155
- Raytheon Co. Bedford Complex Library, 157
- The University of Texas. Military Physics Research Laboratory, 265

Aeronautical Charts
- American Geographical Society, 14
- U.S. Department of Commerce. Coast and Geodetic Survey, 188

Aeronautical Engineering
- Aerojet-General Corp. Corporate Technical Information Center, 1
- Aircraft Technical Service, Inc., 3
- California Institute of Technology. Libraries, 47
- Columbia University. Enginering Library, 56
- Douglas Aircraft Co., Inc. Douglas Corporate Library, 62
- Federal Aviation Agency:
  - Aeronautical Center Library Service, 67
  - National Aviation Facilities Experimental Center, 68
- Georgia Institute of Technology. Price Gilbert Memorial Library, 74
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- National Center for Atmospheric Research. NCAR Library, 130
- New York Public Library, 138
- Ohio State University. Aeronautical-Civil Engineering Library, 143
- Pacific Aerospace Library, 147
- Princeton University. Aeronautical Engineering Library, 153
- Purdue University:
  - Engineering Experiment Station, 155
  - University Libraries and Audio-Visual Center, 156
- Raytheon Co. Equipment Division Headquarters Library, 157
- TRW Space Technology Laboratories, 179
- United Aircraft Corp. Research Library, 179
- U.S. Department of the Treasury. U.S. Coast Guard. Office of Engineering, 227
- University of California, Los Angeles. Engineering and Mathematical Sciences Library, 239
- University of Illinois. Engineering Library, 245

Aeronautical Engineering—Continued
- University of Michigan. Science and Engineering Libraries, 250
- University of Notre Dame. Engineering Library, 255
- University of Pennsylvania. Towne Scientific Library, 260
- University of Toledo. Library, 265
- University of Tulsa. Sidney Born Technical Library, 266

Aerospace Medicine, *see* Space Biology and Medicine

Aerospace Sciences
- Aerojet-General Corp. Corporate Technical Information Center, 1
- Aerospace Industries Association of America, Inc., 2
- All American Engineering Co., 4
- American Astronautical Society, 7
- American Nuclear Society, 20
- American Ordnance Association, 21
- American Society of Civil Engineers, 28
- Arthur D. Little, Inc., 33
- Avco Corp.:
  - Avco-Everett Research Laboratory, 36
  - Spaceflight Programs Office, 37
- Barnes Engineering Co., 38
- Battelle Memorial Institute. Library, 40
- The Boeing Co. Aero-Space Division, 43
- Booz, Allen Applied Research, Inc., 44
- California Institute of Technology. Jet Propulsion Laboratory, 47
- Douglas Aircraft Co., Inc. Douglas Corporate Library, 62
- Engineering Societies Library, 65
- Franklin Institute:
  - Laboratories for Research and Development, 71
  - Library, 71
  - Science Museum and Planetarium, 71
- High Voltage Engineering Corp., 80
- Indiana University. Aerospace Research Application Center, 83
- Institute for Scientific Information, 86
- The John Crerar Library, 92
- Library of Congress. Aerospace Technology Division, 94
- Litton Systems, Inc., 97
- Massachusetts Institute of Technology:
  - Instrumentation Laboratory, 102
  - Lincoln Laboratory, 103
- Melpar, Inc. Technical Information Center, 105
- Midwest Research Institute. ASTRA, 108
- The National Academy of Sciences—National Research Council. Space Science Board, 125
- National Aeronautics and Space Administration, 127
- Pacific Aerospace Library, 147
- Raytheon Co. Santa Barbara Operations Library, 157
- Rensselaer Polytechnic Institute, 158
- Republic Aviation Corp. Engineering Library, 158
- Ryan Aeronautical Co. Engineering Library, 162
- Science Communication, Inc., 163
- Smithsonian Institution. Astrophysical Observatory, 165
- Southern Methodist University. Science Library, 171
- Stanford Research Institute, 172

Aerospace Sciences—Continued
- Texas Instruments, Inc. Corporate Technical Information Center, 178
- TRW Space Technology Laboratories, 179
- United Aircraft Corp. Research Library, 179
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - Office of Aerospace Research, 203
- University of California, Los Angeles. Geology-Geophysics Library, 239
- University of Colorado. Regional Technical Reports Center, 242
- The University of Texas. Engineering Library, 264
- Wayne State University. Center for Applications of Science and Technology, 270
- West Virginia University:
  - Agriculture-Engineering Library, 273
  - Engineering Experiment Station, 273
- *See also* Astronautics, Missiles and Rockets, *and* Space Biology and Medicine

Aestivation
- U.S. Department of Defense. Department of the Navy. Hibernation Information Exchange, 204

Agricultural Chemistry
- Allied Chemical Corp. Central Research Laboratory, 4
- American Chemical Society, 8
- American Farm Research Association, 12
- Chas. Pfizer and Co., Inc. Medical Research Laboratories, 53
- Hoffmann-La Roche, Inc., 80
- Indiana University. Chemistry Library, 84
- The John Crerar Library, 92
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Mobil Chemical Co. Edison Township Laboratory, 110
- Socony Mobil Oil Co., Inc. Virginia Carolina Chemical Co., 169
- Sun Oil Co. Research and Development Library, 176
- U.S. Department of Agriculture. National Agricultural Library, 185
- University of North Carolina. Agricultural Experiment Station, 253
- University of Rhode Island. Agricultural Experiment Station, 262
- University of Wyoming. Agricultural Experiment Station, 268

Agriculture
- American Farm Research Association, 12
- American Horticultural Society, Inc., 16
- American Society of Agronomy, 27
- American Society of Sugar Beet Technologists, 29
- Auburn University:
  - Alabama Agricultural Experiment Station, 36
  - Library, 36
- Beet Sugar Development Foundation, 41
- Bio-Dynamic Farming and Gardening Association, Inc., 43
- Brooklyn College Library, 45
- Campbell Soup Co., 48
- The Chemurgic Council, 54

Agriculture—Continued
- Colorado State University. University Libraries, 56
- E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
- Illinois Institute of Technology. IIT Research Institute, 81
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- Lilly Research Laboratories, 97
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Michigan State University. Agricultural Experiment Station, 107
- The National Academy of Sciences—National Research Council:
  - Agricultural Board, 112
  - Agricultural Research Institute, 113
- National Plant Food Institute, 134
- North Dakota State University of Agriculture and Applied Science. North Dakota Agricultural Experiment Station, 140
- Oak Ridge Institute of Nuclear Studies, 141
- Ohio Agricultural Experiment Station, 143
- Ohio State University. Agriculture Library, 143
- Pennsalt Chemicals Corp., 149
- Pickle Packers International, Inc., 151
- Pineapple Research Institute of Hawaii, 151
- Potato Association of America, 152
- Purdue University:
  - Agricultural Information Department, 154
  - Engineering Experiment Station, 155
  - University Libraries and Audio-Visual Center, 156
- Rutgers—The State University:
  - Central Library, 161
  - New Jersey College of Agriculture Library, 161
- Stanford Research Institute, 172
- Sulphur Institute, 175
- Texas A & M University:
  - Cushing Memorial Library, 177
  - Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture, 181
- University of Alaska. Alaska Agricultural Experiment Station, 235
- University of Arizona. Library, 236
- University of California, Berkeley. General Library, 238
- University of California, Davis. University Library, 238
- University of California, Riverside. University Library, 240
- University of Florida. Agricultural Experiment Stations, 243
- University of Illinois:
  - Agriculture Library, 245
  - Engineering Library, 245
  - Illinois Agricultural Experiment Station, 246
- University of Kentucky:
  - Agricultural Experiment Station, 247
  - University Libraries, 248
- University of Maine. Maine Agricultural Experiment Station, 248

Agriculture—Continued
- University of Nevada:
  - Agricultural Experiment Station, 252
  - Library, 252
- University of New Hampshire. Agricultural Experiment Station, 253
- University of North Carolina:
  - Agricultural Experiment Station, 253
  - D. H. Hill Library, 254
- University of Puerto Rico:
  - General Library, 261
  - Puerto Rico Agricultural Experiment Station, 262
- University of Rhode Island. Agricultural Experiment Station, 262
- University of Vermont:
  - Bailey Memorial Library, 266
  - Vermont Agricultural Experiment Station, 266
- University of Wyoming. Agricultural Experiment Station, 268
- West Virginia University:
  - Agriculture-Engineering Library, 273
  - West Virginia Agricultural Experiment Station, 274
- *See also* Animal Husbandry, Animal Nutrition, Apiculture, Chemurgy, Fertilizers, History of Agriculture, Irrigation, Soil Conservation, Tropical Agriculture, Weed Control, *and* individual names of crops

Agronomy, *see* Soil Science

Air Conditioning
- Air-Conditioning and Refrigeration Institute, 3
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Carrier Research and Development Co. Logan Lewis Library, 51
- Mueller Brass Co., 110
- National Mineral Wool Insulation Association, 133
- U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193
- University of Florida. Florida Engineering and Industrial Experiment Station, 244

Aircraft
- Aerospace Industries Association of America, Inc., 2
- Aircraft Technical Service, Inc., 3
- All American Engineering Co., 4
- American Helicopter Society, Inc., 15
- American Society for Quality Control, Inc., 26
- Bell Helicopter Co., 42
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Douglas Aircraft Co., Inc. Douglas Corporate Library, 62
- Federal Aviation Agency. Headquarters Library, 68
- Fitz Patrick Co., 69
- Institute for Scientific Information, 86
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- Ryan Aeronautical Co. Engineering Library, 162
- Smithsonian Institution. National Air Museum, 166
- United Aircraft Corp. Research Library, 179

Aircraft Accidents, *see* Aviation Safety Engineering

Airglow
- American Meteorological Society, 19
- Geo-Science, Inc., 75
- The National Academy of Sciences—National Research Council:
  - U.S. National Committee for International Years of the Quiet Sun, 125
  - World Data Center A, 126
- U.S. Department of Commerce. National Bureau of Standards. Upper Atmosphere and Space Physics Division, 198

Air Navigation, *see* Navigation

Air Pollution
- Air Pollution Control Association, 3
- American Industrial Hygiene Association, 16
- American Meteorological Society, 19
- Bay Area Air Pollution Control District, 41
- Bethlehem Steel Co. Homer Research Laboratories, 42
- Fine Organics, Inc., 68
- Franklin Institute. Laboratories for Research and Development, 70
- Los Angeles County Air Pollution Control District, 98
- Mellon Institute, 105
- National Coal Association, 131
- National Coal Association. Bituminous Coal Research, Inc., 131
- Pennsylvania Department of Health. Division of Air Pollution Control, 149
- Scientists' Institute for Public Information, 164
- Tennessee Valley Authority. Technical Library, 177
- U.S. Department of Commerce. Weather Bureau, 201
- U.S. Department of Health, Education, and Welfare. Public Health Service. Inquiries Branch, Office of Information and Publications, 206
- U.S. Department of the Interior. Bureau of Mines. Office of Program Coordination, 211
- University of California, Riverside. University Library, 240
- University of Michigan. Public Health Library, 250
- University of Washington. Environmental Health Division, 267

Airports
- Federal Aviation Agency. Headquarters Library, 68
- University of California. Institute of Transportation and Traffic Engineering, 237

Air Traffic Control
- Aries Corp., 33
- Avco Corp. Ordnance Division, 37
- Federal Aviation Agency:
  - Aeronautical Center Library Service, 67
  - Headquarters Library, 68
  - National Aviation Facilities Experimental Center, 68

Air Transportation
- Air Transport Association of America, 3
- American Society of Civil Engineers, 28
- Federal Aviation Agency, 68
- Ohio State University. Aeronautical-Civil Engineering Library, 143
- Republic Aviation Corp. Engineering Library, 158

Air Transportation—Continued
- University of California. Institute of Transportation and Traffic Engineering, 237

Alchemy
- University of Pennsylvania. Edgar Fahs Smith Memorial Collection, 258

Alcohol, *see* Distilled Spirits

Alcoholism
- Rutgers—The State University. Center of Alcohol Studies, 160

Algology
- Carnegie Institution of Washington. Department of Plant Biology, 50
- Harvard University. Farlow Reference Library, 77
- Indiana University. Culture Collection of Algae, 84
- Ohio State University. Institute of Polar Studies, 145
- University of Colorado. Museum, 242
- University of North Carolina. Botany Library, 253
- University of Puerto Rico. Institute of Marine Biology, 261

Alkaline Earths
- Barium and Chemicals, Inc., 38

Alkaloids
- Columbia University. Chemistry Library, 56
- The National Academy of Sciences—National Research Council. Committee on Drug Addiction and Narcotics, 114
- New Mexico Highlands University. Institute of Scientific Research, 137
- U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227

Allergy
- Association of Allergists for Mycological Investigations, Inc., 34

Alloys
- Alloy Casting Institute, 5
- American Zinc Institute, Inc., 30
- Battelle Memorial Institute:
  - Cobalt Information Center, 39
  - Defense Metals Information Center, 39
- Cheminform Institute, 53
- Crucible Steel Co. of America, 60
- Foote Mineral Co., 69
- Franklin Institute. Laboratories for Research and Development, 70
- Industrial Tectonics, Inc. Bearing Division, 85
- International Nickel Co., Inc., 89
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- Oak Ridge National Laboratory. Research Materials Information Center, 142
- Reynolds Metals Co. Technical Information Center, 159
- U.S. Department of Commerce. National Bureau of Standards. Metallurgy Division, 195
- U.S. Department of Defense. Department of the Air Force. Air Force Materials Laboratory (MAAM), 203

Alloys—Continued
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Morris Metallurgy Research Center, 214
    - Rolla Metallurgy Research Center, 214
    - Salt Lake City Metallurgy Research Center, 214
    - Reno Metallurgy Research Center, 214

Aluminum
- Aluminum Siding Association, 5
- American Bureau of Metal Statistics, 7
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Mueller Brass Co., 110
- Reynolds Metals Co. Technical Information Center, 159

Ammunition
- American Ordnance Association, 21
- Avco Corp. Ordnance Division, 37
- Olin Mathieson Chemical Corp. Olin Research Center, 146
- Remington Arms Co., Inc. Supporting Research and Development Library, 158

Amphibians, *see* Herpetology

Analgesics
- The National Academy of Sciences—National Research Council. Committee on Drug Addicition and Narcotics, 114

Analytical Chemistry
- American Chemical Society, 8
- American Industrial Hygiene Association, 16
- Armco Steel Corp. Research Center, 33
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Hazleton Laboratories, Inc., 79
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- Pennsalt Chemicals Corp., 149
- Southern Research Institute, 171
- Stanford Research Institute, 172
- Texas A & M University. Chemical Thermodynamic Properties Center, 177
- U.S. Department of Commerce. National Bureau of Standards. Analytical Chemistry Division, 192
- Universal Oil Products Co. Research Library, 235
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Florida. Chemistry Library, 244

Anatomy
- American Speech and Hearing Association, 29
- California College of Medicine, 46
- College of Physicians of Philadelphia, 55
- Columbia University. Medical Library, 57
- Gulf Coast Research Laboratory, 75
- Indiana University. Anatomy-Physiology Library, 83
- National Chiropractic Association, 131
- Society of Vertebrate Paleontology, 169
- Stanford University. Lane Medical Library, 173
- University of Oklahoma. Science Library, 257
- University of Pennsylvania:
  - Biology Library, 257
  - Wistar Institute Library, 260

Anatomy—Continued
- The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263

Anesthesiology
- American Dental Association, 10
- Animal Care Panel, Inc., 31
- Columbia University. Medical Library, 57
- Medical Chemicals Corp., 104
- The National Academy of Sciences—National Research Council. Committee on Anesthesia, 113
- Smithsonian Institution. National Zoological Park, 166
- The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263

Animal Fats, *see* Fats and Oils

Animal Husbandry
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Michigan State University. Agricultural Experiment Station, 107
- Ohio Agricultural Experiment Station, 143
- Purdue University. Agricultural Information Department, 154
- Rutgers—The State University. New Jersey Agricultural Experiment Station, 161
- Texas A & M University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture:
  - Cooperative State Research Service, 184
  - National Agricultural Library, 185
- University of California, Davis. University Library, 238
- University of Florida. Agricultural Experiment Stations, 243
- University of Illinois:
  - Agriculture Library, 245
  - Illinois Agricultural Experiment Station, 246
- University of Kentucky. Agricultural Experiment Station, 247
- University of Maine. Maine Agricultural Experiment Station, 248
- University of Nevada. Agricultural Experiment Station, 252
- University of New Hampshire. Agricultural Experiment Station, 253
- University of North Carolina. Agricultural Experiment Station, 253
- University of Pennsylvania. C. J. Marshall Memorial Library, 259
- University of Puerto Rico. Puerto Rico Agricultural Experiment Station, 262
- University of Rhode Island. Agricultural Experiment Station, 262
- University of Wyoming. Agricultural Experiment Station, 268
- West Virginia University. West Virginia Agricultural Experiment Station, 274
- *See also* Dairy Science *and* Poultry Science

Animal Nutrition
- American Farm Research Association, 12
- Animal Care Panel, Inc., 31
- Archer-Daniels-Midland Co., 32
- Doty Laboratories, 62
- General Mills, Inc., 73
- Lilly Research Laboratories, 97
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Marine Chemurgics, Inc., 100
- The National Academy of Sciences—National Research Council. Institute of Laboratory Animal Resources, 120
- Nopco Chemical Co., 139
- Purdue University. Trace Level Research Institute, 156
- Smithsonian Institution. National Zoological Park, 166
- U.S. Department of Agriculture. Cooperative State Research Service, 184
- U.S. Department of the Interior.
  - Fish and Wildlife Service.
    - Bureau of Sport Fisheries and Wildlife:
      - Eastern Fish Nutrition Laboratory, 219
      - Southeastern Fish Cultural Laboratory, 220
      - Western Fish Nutrition Laboratory, 221
- University of Kentucky. Agricultural Experiment Station, 247
- University of Maine. Maine Agricultural Experiment Station, 248

Animal Pathology
- Massachusetts Institute of Technology. Department of Nutrition and Food Science, 102
- U.S. Department of Agriculture.
  - Agricultural Research Service:
    - National Animal Disease Laboratory, 183
    - Plum Island Animal Disease Laboratory, 184
  - Cooperative State Research Service, 184
- U.S. Department of the Interior.
  - Fish and Wildlife Service.
    - Bureau of Sport Fisheries and Wildlife:
      - Denver Wildlife Research Center, 218
      - Eastern Fish Disease Laboratory, 219
      - Patuxent Wildlife Research Center, 218
      - Western Fish Disease Laboratory, 221
- University of California, Berkeley. Insect Diagnostic Service, 238
- University of Maine. Maine Agricultural Experiment Station, 248
- University of Nevada. Agricultural Experiment Station, 252
- University of Rhode Island. Agricultural Experiment Station, 262
- West Virginia University. West Virginia Agricultural Experiment Station, 274

Antarctic, *see* Polar Research

Antennas
- Ohio State University. Antenna Laboratory Library, 143
- U.S. Department of Commerce. National Bureau of Standards. Radio Systems Division, 198

Anthropology
- American Museum of Natural History, 19
- Arctic Institute of North America. Arctic Bibliography Project, 32
- Bernice P. Bishop Museum, 42
- Buffalo Museum of Science, 45
- Cranbrook Institute of Science, 59
- Harvard University. Peabody Museum of Archaeology and Ethnology, 78
- Miami University. Museum of Anthropology, 106
- Museum of Northern Arizona, 111
- The National Academy of Sciences—National Research Council. NAS-NRC Library, 122
- New York Academy of Sciences, 137
- Pacific Scientific Information Center, 148
- Rutgers—The State University. Newark Colleges Library, 161
- Smithsonian Institution:
  - Bureau of American Ethnology, 165
  - U.S. National Museum:
    - Museum of Natural History, 167
- Southern California Academy of Sciences, 170
- University of Arizona:
  - Bureau of Ethnic Research, 236
  - Library, 236
- University of California, Berkeley. General Library, 238
- University of Colorado. Museum, 242
- University of Michigan:
  - Museum of Anthropology, 250
  - Science and Engineering Libraries, 250
- University of Oklahoma. Science Library, 257
- University of Southern Mississippi. University Library, 263

Antibiotics, *see* Microbiology *and* Pharmaceutical Science

Antisubmarine Warfare
- Magnavox Co., 99
- Raytheon Co. Submarine Signal Operations Library, 158
- University of Washington. Applied Physics Laboratory, 267

Aphasia
- American Speech and Hearing Association, 29

Apiculture
- U.S. Department of Agriculture. National Agricultural Library, 185
- University of California, Davis. University Library, 238

Aquariums
- American Association of Museums, 6

Aquatic Sciences
- Academy of Natural Sciences of Philadelphia, 1
- American Fisheries Society, 12
- American Museum of Natural History, 19
- California Academy of Sciences, 46
- Cape Haze Marine Laboratory, 49
- Chemical Insecticide Corp., 53
- Duke University. Marine Laboratory, 64
- George Washington University. Biological Serial Record Center, 73
- Gulf Coast Research Laboratory, 75
- Hazleton Laboratories, 79

Aquatic Sciences—Continued
- Illinois Natural History Survey, 82
- The Institute of Paper Chemistry, 87
- International Oceanographic Foundation, 89
- Marine Biological Laboratory, 100
- Mount Desert Island Biological Laboratory, 110
- National Center for Atmospheric Research. NCAR Library, 130
- Smithsonian Institution. Astrophysical Observatory, 165
- Tennessee Valley Authority. Technical Library, 177
- U.S. Department of the Interior. Fish and Wildlife Service, 216
- University of California, San Diego. Scripps Institution of Oceanography, 240
- University of North Carolina. Zoology Library, 254
- University of Puerto Rico. Institute of Marine Biology, 261
- University of Rhode Island:
  - Aquatic Sciences Information Retrieval Center, 262
  - Narragansett Marine Laboratory, 263
- The University of Texas. Institute of Marine Science, 265
- University of Washington. Friday Harbor Laboratories, 267
- Water Information Center, Inc., 270

Arachnology
- American Museum of Natural History, 19
- Ohio State University. Botany and Zoology Library, 144

Arboretums
- American Association of Museums, 6

Archeology
- American Museum of Natural History, 19
- Bernice P. Bishop Museum, 42
- Harvard University. Peabody Museum of Archaeology and Ethnology, 78
- Miami University. Museum of Anthropology, 106
- Museum of Northern Arizona, 111
- Smithsonian Institution.
  - Bureau of American Ethnology, 165
  - U.S. National Museum:
    - Museum of Natural History, 167
- Society for American Archeology, 168
- U.S. Department of the Interior. National Park Service, 223
- University of Arizona. Laboratory of Tree Ring Research, 236
- University of Colorado. Museum, 242
- University of Michigan. Museum of Anthropology, 250

Architecture
- The American Institute of Architects, 16
- Georgia Institute of Technology. Price Gilbert Memorial Library, 74
- Massachusetts Institute of Technology. Arthur Rotch Memorial Library of Architecture and Planning, 101
- Miami University. University Libraries, 106
- Princeton University. Bureau of Urban Research, 152
- Tennessee Valley Authority. Technical Library, 177
- Texas A & M University. Cushing Memorial Library, 177
- University of California, Berkeley. General Library, 238
- University of Houston. University Libraries, 245

Architecture—Continued
  University of Kentucky. University Libraries, 248
  The University of Texas. Engineering Library, 264

Arctic, *see* Polar Research

Arid Lands, *see* Desert Research

Armament, *see* Military Science and Technology, Ordnance, *and* Weapons and Weapon Systems

Arthritis, *see* Medicine

Artifical Limbs, *see* Prosthetics

Artillery, *see* Ordnance *and* Weapons and Weapon Systems

Asphalt, *see* Bituminous Materials

Astronautics
  American Astronautical Society, 7
  American Ordnance Association, 21
  California Institute of Technology. Jet Propulsion Laboratory, 47
  Federal Aviation Agency. Headquarters Library, 68
  Institute for Scientific Information, 86
  Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
  Melpar, Inc. Technical Information Center, 105
  National Aeronautics and Space Administration, 127
  National Center for Atmospheric Research. NCAR Library, 130
  New York Public Library, 138
  Ohio State University. Antenna Laboratory Library, 143
  Pacific Aerospace Library, 147
  Princeton University:
    Astronomy Library, 153
    Aeronautical Engineering Library, 153
  Raytheon Co. Sudbury Operations Library, 158
  See also Spacecraft

Astronomy and Astrophysics
  American Institute of Physics, 17
  American Meteorological Society, 19
  American Museum of Natural History, 19
  Astronomical League, 35
  Avco Corp. Electronics Division, 37
  The Boeing Co. Boeing Scientific Research Laboratories, 44
  Brooklyn College Library, 45
  Buffalo Museum of Science, 45
  California Academy of Sciences, 46
  California Institute of Technology. Libraries, 47
  Carnegie Institution of Washington:
    Department of Terrestrial Magnetism, 50
    Mount Wilson and Palomar Observatiories, 50
  Case Institute of Technology, 51
  Columbia University. Physics Library, 57
  Cranbrook Institute of Science, 59
  Harvard University. Phillips Library, 78
  Indiana University. Astronomy-Physics-Mathematics Library, 83
  Massachusetts Institute for Technology. Aeronautics and Astronautics Library, 101

Astronomy and Astrophysics—Continued
  National Center for Atmospheric Research:
    High Altitude Observatory Library, 130
    NCAR Library, 130
  New York Academy of Sciences, 137
  New York Public Library, 138
  Ohio State University. Cole Memorial Library of Physics, 144
  Princeton University. Astronomy Library, 153
  Republic Aviation Corp. Engineering Library, 158
  Rutgers—The State University. Newark Colleges Library, 161
  Smithsonian Institution. Astrophysical Observatory, 165
  U.S. Department of Commerce.
    Coast and Geodetic Survey:
      Administrative and Technical Services Division, 188
    National Bureau of Standards:
      Upper Atmosphere and Space Physics Division, 198
  U.S. Department of Defense.
    Defense Documentation Center, 202
    Department of the Air Force:
      Office of Aerospace Research, 203
    Department of the Navy:
      U.S. Naval Observatory, 205
  University of Arizona. Institute of Atmospheric Physics, 236
  University of California. Lick Observatory, 237
  University of California, Berkeley. General Library, 238
  University of California, Los Angeles:
    Engineering and Mathematical Sciences Library, 239
    Geology-Geophysics Library, 239
  University of Colorado. Joint Institute for Laboratory Astrophysics, 241
  University of Michigan. Science and Engineering Libraries, 250
  University of Pennsylvania:
    Flower and Cook Observatory, 258
    Mathematics-Physics Library, 259
  University of Pittsburgh. Allegheny Observatory, 261
  University of Southern Mississippi. University Library, 263
  The University of Texas. Physics Library, 265
  See also Cosmic Rays, Meteorites, *and* Solar Physics

Atmospheric Physics
  Air Pollution Control Association, 3
  Allen Weather Corp., 4
  American Meteorological Society, 19
  Geo-Science, Inc., 75
  The National Academy of Sciences—National Research Council:
    U.S. National Committee for International Years of the Quiet Sun, 125
    World Data Center A, 126
  National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
  Ohio State University. Institute for Research in Vision, 145
  Science Communication, Inc., 163
  Smithsonian Institution. Astrophysical Observatory, 165
  Stanford Research Institute, 172

Atmospheric Physics—Continued
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Boulder Laboratories Library, 193
    - Troposphere and Space Telecommunications Division, 198
    - Upper Atmosphere and Space Physics Division, 198
  - Weather Bureau, 201
- University of Arizona. Institute of Atmospheric Physics, 236
- University of Nevada. Desert Research Institute, 252
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
- Winzen Research, Inc., 274
- *See also* Meteorology

Atomic Energy, *see* Nuclear Science and Technology

Audiology
- Alexander Graham Bell Association for the Deaf, Inc., 3
- American Speech and Hearing Association, 29
- Gallaudet College. Edward Miner Gallaudet Memorial Library, 72
- The National Academy of Sciences—National Research Council. NAS–NRC Committee on Hearing, Bioacoustics, and Biomechanics, 122
- Southern Methodist University. Acoustics Laboratory, 171

Aurorae
- American Meteorological Society, 19
- The National Academy of Sciences—National Research Council:
  - U.S. National Committee for International Years of the Quiet Sun, 125
  - World Data Center A, 126
- U.S. Department of Commerce. National Bureau of Standards. Upper Atmosphere and Space Physics Division, 198
- University of Alaska. World Data Center A: Aurora (Instrumental), 235

Automation, *see* Computer Science, Data Processing, Documentation, Industrial Engineering, *and* Information Storage and Retrieval

Automotive Engineering
- Automobile Manufacturers Association, 36
- Borg-Warner Corp., Roy C. Ingersoll Research Center, 44
- Consumers Union of the United States, Inc., 59
- Eaton Manufacturing Co., Research Center, 65
- Ford Motor Co., Technical Information Section, 69
- New York Public Library, 138

Aviation Safety Engineering
- Federal Aviation Agency, 67
- U.S. Department of Defense. Department of the Air Force. School of Aerospace Medicine, 203

Bacteriology
- American Bio-Synthetics Corp., 7
- Chas. Pfizer and Co., Inc. Medical Research Laboratories, 53
- Duke University. Biology—Forestry Library, 63

Bacteriology—Continued
- Indiana University:
  - Anatomy-Physiology Library, 83
  - Biology Library, 84
- Iowa State University of Science and Technology:
  - Iowa Agriculture and Home Economics Experiment Station, 90

Systematic Bacteriology Research Group, 91
- Ohio State University:
  - Institute of Polar Studies, 145
  - Pharmacy and Microbiology Library, 146
- Pickle Packers International, Inc., 151
- University of North Carolina. Agricultural Experiment Station, 253
- University of Notre Dame. Biology Library, 255
- The University of Texas. Biology Library, 263
- West Virginia University. West Virginia Agricultural Experiment Station, 274
- *See also* Microbiology

Ballistics
- Remington Arms Co., Inc. Supporting Research and Development Library, 158
- The University of Texas. Military Physics Research Laboratory, 265

Balloons
- Litton Systems, Inc. Applied Science Division Library, 97
- Winzen Research, Inc., 274

Barium
- Barium and Chemicals, Inc., 38
- National Lead Co. Baroid Division, 133

Bauxite
- Reynolds Metals Co. Technical Information Center, 159

Beach Erosion Control, *see* Coastal Engineering

Bearings
- American Society of Lubrication Engineers, 28
- Franklin Institute. Laboratories for Research and Development, 70
- Industrial Tectonics, Inc. Bearing Division, 85
- Marlin-Rockwell Corp., 100
- Metal Powder Industries Federation-American Powder Metallurgy Institute, 105
- U.S. Department of Defense. Department of the Army. Plastics Technical Evaluation Center, 204
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Beekeeping, *see* Apiculture

Beet Sugar, *see* Sugar

Beneficiation
- Blocked Iron Corp., 43
- Michigan Technological University. Institute of Mineral Research, 107
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Albany Metallurgy Research Center, 208
    - Minneapolis Metallurgy Research Center, 211
    - Reno Metallurgy Research Center, 214
    - Rolla Metallurgy Research Center, 214

Beneficiation—Continued
- U.S. Department of the Interior—Continued
  - Bureau of Mines—Continued
    - Salt Lake City Metallurgy Research Center, 214
    - Tucson Metallurgy Research Laboratory, 215
    - Tuscaloosa Metallurgy Research Center, 215
- University of Arizona. Arizona Bureau of Mines, 235
- West Virginia University. Bureau of Coal Research, 273

Beryllium
- Battelle Memorial Institute. Defense Metals Information Center, 39

Bioacoustics, *see* Acoustics

Bioastronautics, *see* Space Biology and Medicine

Biochemistry
- American Bio-Synthetics Corp., 7
- American Cancer Society, Inc., 8
- American Chemical Society, Inc., 8
- American Industrial Hygiene Association, 16
- Battelle Memorial Institute. Library, 40
- California College of Medicine, 46
- Campbell Soup Co., 48
- Cedars of Lebanon Hospital, 50
- Chas. Pfizer and Co., Inc., Medical Research Laboratories, 53
- Colgate-Palmolive Co., 55
- College of Physicians of Philadelphia, 55
- Colorado State University. University Libraries, 56
- Columbia University:
  - Biological Sciences Library, 56
  - Medical Library, 57
- Harvard University:
  - Biology Laboratories, 76
  - Chemistry Library, 77
- Hazleton Laboratories, Inc., 79
- Indiana University. Chemistry Library, 84
- Institute for Muscle Disease, Inc., 86
- The Institute of Paper Chemistry, 87
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- Massachusetts Institute of Technology:
  - Department of Nutrition and Food Science, 102
  - Neurosciences Research Information Center, 103
- Mead Johnson and Co., 104
- Mellon Institute, 105
- National Center for Atmospheric Research. NCAR Library, 130
- New Mexico Highlands University. Institute of Scientific Research, 137
- New York Academy of Sciences, 137
- New York Public Library, 138
- Ohio Agricultural Experiment Station, 143
- Pineapple Research Institute of Hawaii, 151
- Princeton University. Chemistry Library, 153
- Purdue University:
  - Agricultural Information Department, 154
  - University Libraries and Audio-Visual Center, 156
- Rutgers—The State University:
  - College of Pharmacy Library, 161
  - Institute of Microbiology, 161
- Southern Research Institute, 171

Biochemistry—Continued
- Stanford University. Swain Library of Chemistry, 173
- Texas A. & M. University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture. Agricultural Research Service. National Animal Disease Laboratory, 183
- U.S. Department of Defense. Department of the Air Force. School of Aerospace Medicine, 203
- U.S. Department of the Interior. Geological Survey, 221
- University of California, Berkeley. General Library, 238
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Maine. Maine Agricultural Experiment Station, 248
- University of Nevada. Desert Research Institute, 252
- University of Oklahoma:
  - Chemistry Library, 255
  - Medical Center Library, 257
- University of Pennsylvania:
  - Johnson Research Foundation, 258
  - Wistar Institute Library, 260
- The University of Texas:
  - M. D. Anderson Hospital and Tumor Institute, 263
  - J. W. Mallet Chemical Library, 265
- University of Wyoming. Agricultural Experiment Station, 268
- West Virginia University. West Virginia Agricultural Experiment Station, 274
- *See also* Agricultural Chemistry, Enzymes, Hormones, Metabolism, Proteins, *and* Vitamins

Bioengineering
- Beckman Instruments, Inc., 41
- Georgia Institute of Technology. Price Gilbert Memorial Library, 74
- The National Academy of Sciences—National Research Council. NAS–NRC Committee on Hearing, Bioacoustics, and Biomechanics, 122
- U.S. Veterans Administration. Prosthetic and Sensory Aids Service, 234
- University of Kentucky:
  - University Libraries, 248
  - Wenner-Gren Aeronautical Research Laboratory, 248
- University of Michigan. Science and Engineering Libraries, 250
- University of Notre Dame. Lobund Laboratory, 255
- University of Pennsylvania. Moore School of Electrical Engineering Library, 259

Biological Warfare
- Science Communication, Inc., 163
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - School of Aerospace Medicine, 203
- University of Pennsylvania. Projects Summit and Spice Rack, 260

Biology
- Academy of Natural Sciences of Philadelphia, 1
- Arthur D. Little, Inc., 33
- Auburn University. Alabama Agricultural Experiment Station, 36
- Brookhaven National Laboratory, 45

Biology—Continued
Brooklyn College Library, 45
Buffalo Museum of Science, 45
California Institute of Technology. Libraries, 47
Cape Haze Marine Laboratory, Inc., 49
Carnegie Institution of Washington. Department of Plant Biology, 50
Cedars of Lebanon Hospital, 50
Colgate-Palmolive Co., 55
Columbia University. Biological Sciences Library, 56
Cranbrook Institute of Science, 59
Duke University. Biology-Forestry Library, 63
Entomological Society of America, 66
General Foods Corp., 73
George Washington University. Biological Serial Record Center, 73
Harvard University. Biology Laboratories, 76
Highlands Biological Station, Inc., 80
Indiana University. Biology Library, 84
Iowa State University of Science and Technology:
  Institute for Atomic Research, 90
  Library, 90
The John Crerar Library, 92
Library of Congress. Science and Technology Division, 96
Lilly Research Laboratories, 97
Massachusetts Institute of Technology:
  Neurosciences Research Information Center, 103
  Science Library, 103
Michigan Technological University. Library, 108
Midwest Inter-Library Center, 108
Minnesota Mining and Manufacturing Company. 3M Technical Library, 109
Mount Desert Island Biological Laboratory, 110
New York Academy of Sciences, 137
New York University. New York University Libraries, 138
Oak Ridge Institute of Nuclear Studies, 141
Oak Ridge National Laboratory. Oak Ridge National Laboratory Library, 142
Ohio State University. Ohio Biological Survey, 146
Princeton University. Biology and Geology Library, 153
Purdue University. University Libraries and Audio-Visual Center, 156
Rutgers—The State University:
  Central Library, 161
  College of Pharmacy Library, 161
San Diego Natural History Museum, 162
Smithsonian Institution. Science Information Exchange, 166
Southern California Academy of Sciences, 170
Southern Research Institute, 171
Stanford University. Falconer Biology Library, 173
Texas A & M University. Texas Agricultural Experiment Station, 178
U.S. Department of Agriculture. National Agricultural Library, 185
U.S. Department of Defense.
  Defense Documentation Center, 202
  Department of the Air Force:
    Office of Aerospace Research, 203
U.S. Department of the Interior. National Park Service, 223

Biology—Continued
University of California, Berkeley. General Library, 238
University of Colorado. Biological Sciences Curriculum Study, 241
University of Dayton. University Library, 243
University of Houston. Libraries, 245
University of Illinois. Biology Library, 245
University of Kentucky. University Libraries, 248
University of Michigan. Science and Engineering Libraries, 250
University of Nevada. Biology Museum and Research Laboratories, 252
University of North Carolina. D. H. Hill Library, 254
University of Notre Dame. Biology Library, 255
University of Oklahoma:
  Medical Center Library, 257
  Palynology Research Center, 257
University of Pennsylvania:
  Biology Library, 257
  Wistar Institute Library, 260
University of Southern Mississippi. Library, 263
The University of Texas:
  M. D. Anderson Hospital and Tumor Institute, 263
  Biology Library, 263
Warner-Lambert Pharmaceutical Co. Warner-Lambert Research Institute, 270
Western Reserve University. Freiberger Library, 272
Wildlife Management Institute, 274
See also Anatomy, Aquatic Sciences, Botany, Cytology, Ecology, Embryology, Genetics, Histology, Laboratory Animals, Microbiology, Nutrition, Parasitology, Pathology, Physiology, Psychobiology, Radiobiology, Space Biology and Medicine, Taxonomy, *and* Zoology

Biomathematics
Hazleton Laboratories, Inc., 79
Massachusetts Institute of Technology. Neurosciences Research Information Center, 103
U.S. Department of Agriculture. National Agricultural Library, 185
University of Pittsburgh. Graduate School of Public Health Library, 261

Biomechanics, *see* Bioengineering

Biometrics, *see* Biomathematics

Biophysics
Carnegie Institution of Washintgon. Department of Terrestrial Magnetism, 50
Columbia University. Medical Library, 57
Harvard University. Biology Laboratories, 76
High Voltage Engineering Corp., 80
Institute for Muscle Disease, Inc., 86
Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
Massachusetts Institute of Technology. Neurosciences Research Information, 103
New York Academy of Sciences, 137
University of Illinois. Biology Library, 245
University of Michigan. Science and Engineering Libraries, 250

Biophysics—Continued
  University of Pennsylvania. Johnson Research Foundation, 258

Birds, *see* Ornithology

Birth Control
  Margaret Sanger Research Bureau, 100
  Princeton University. Population Research Library, 154
  See also Contraceptives

Bituminous Materials
  American Society for Testing and Materials, 26
  Battenfeld Grease and Oil Corp., 41
  Massachusetts Institute of Technology. Materials Research Laboratory, 103
  Purdue University. Joint Highway Research Project, 155
  Troxler Electronic Laboratories, Inc., 179
  U.S. Department of the Interior. Bureau of Reclamation, 215
  University of California. Institute of Transportation and Traffic Engineering, 237

Blast Furnaces, *see* Extractive Metallurgy

Bleaching
  American Oil Chemists' Society, 20
  Carus Chemical Co. Permanganate Information Service, 50
  The Institute of Paper Chemistry, 87

Blindness
  American Foundation for the Blind, Inc., 13
  Library of Congress. Division for the Blind, 95
  National Society for the Prevention of Blindness, 136

Blood, *see* Hematology

Botanical Gardens
  American Association of Museums, 6

Botany
  American Museum of Natural History, 19
  Arctic Institute of North America. Arctic Bibliography Project, 32
  Bernice P. Bishop Museum, 42
  Buffalo Museum of Science, 45
  California Academy of Sciences, 46
  Carnegie Institution of Washington. Department of Plant Biology, 50
  Chas. Pfizer & Co., Inc. Medical Research Laboratories, 53
  Colorado State University. University Libraries, 56
  Columbia University. Biological Sciences Library, 56
  Connecticut Botanical Society, Inc., 58
  Cranbrook Institute of Science, 59
  Duke University. Biology—Forestry Library, 63
  Harvard University:
    Arnold Arboteum and Gray Herbarium, 76
    Farlow Reference Library, 77
    Library of Economic Botany, 78
  Highlands Biological Station, Inc., 80
  Illinois Natural History Survey, 82
  Indiana University. Biology Library, 84
  Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90

Botany—Continued
  Lilly Research Laboratories, 97
  Louisiana State University. Main Library, 98
  Massachusetts Horticultural Society, 101
  Miami University. Herbarium, 106
  Museum of Northern Arizona, 111
  The National Academy of Sciences—National Research Council. Office of the Foreign Secretary, 123
  Norfolk Botanical Garden, 139
  North Dakota State University of Agriculture and Applied Science. Herbarium, 140
  Ohio Agricultural Experiment Station, 143
  Ohio State University:
    Botany and Zoology Library, 144
    Natural Resources Institute, 145
    Ohio Biological Survey, 146
  Pacific Scientific Information Center, 148
  Pacific Vegetation Project, 148
  Pineapple Research Institute of Hawaii, 151
  Princeton University. Biology and Geology Library, 153
  Purdue University. Agricultural Information Department, 154
  Rutgers—The State University:
    Newark Colleges Library, 161
    New Jersey Agricultural Experiment Station, 161
    New Jersey College of Agriculture, 161
  Smithsonian Institution:
    Canal Zone Biological Area, 166
    U.S. National Museum:
      Museum of Natural History, 167
  Southern California Academy of Sciences, 170
  Southern Methodist University. Herbarium, 171
  U.S. Department of Agriculture:
    Cooperative State Research Service, 184
    National Agricultural Library, 185
  University of Arizona. Library, 236
  University of California, Los Angeles. Biomedical Library, 239
  University of Colorado:
    Institute of Arctic and Alpine Research, 241
    Museum, 242
  University of Illinois:
    Biology Library, 245
    Herbarium, 246
  University of Maine. Maine Agricultural Experiment Station, 248
  University of Michigan:
    Museum of Anthropology, 250
    Science and Engineering Libraries, 250
    University Herbarium, 251
  University of Nevada. Biology Museum and Research Laboratories, 252
  University of North Carolina:
    Agricultural Experiment Station, 253
    Botany Library, 253
  University of Notre Dame. Biology Library, 255
  University of Oklahoma. Science Library, 257
  University of Pennsylvania:
    Biology Library, 257
    Morris Arboretum Library, 259
  University of Southern Mississippi. University Library, 263

Botany—Continued
  The University of Texas. Biology Library, 263
  University of Vermont. Pringle Herbarium, 266
  University of Wyoming.
    Rocky Mountain Herbarium, 268
    University Library, 269
  Viccars Seed Laboratory, 269
  West Virginia University. Herbarium, 273
  See also Algology, Bryology, Herbs, Lichens, Malacology, Medicinal Plants, Mycology, Palynology, Plant Nutrition, Plant Pathology, Plant Physiology, Seeds, *and* Tropical Fauna and Flora

Braille
  Library of Congress. Division for the Blind, 95

Brass
  Mueller Brass Company, 110

Bryology
  Harvard University. Farlow Reference Library, 77
  University of Colorado. Museum, 242

Building Materials
  American Society for Testing and Materials, 26
  Cheminform Institute, 53
  Construction Specifications Institute, Inc., 58
  Expanded Shale, Clay, and Slate Institute, 67
  Massachusetts Institute of Technology. Joint Highway Research Project, 102
  The National Academy of Sciences—National Research Council. Committee on Fire Research, 114
  National Crushed Stone Association, 132
  National Slag Association, 135
  U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193
  U.S. Department of the Interior. Bureau of Mines. Office of the Assistant Director, Mineral Resource Development, 213

Building Technology
  American Concrete Institute, 10
  The American Institute of Architects, 16
  American Plywood Association, 24
  American Society of Civil Engineers, 28
  Architectural Woodwork Institute, 32
  Associated General Contractors of America, 33
  Construction Specifications Institute, Inc., 58
  Copper Development Association, Inc., 59
  Expanded Shale, Clay, and Slate Institute, 67
  Massachusetts Institute of Technology. Materials Research Laboratory, 103
  Mueller Brass Company, 110
  The National Academy of Sciences—National Research Council:
    Building Research Advisory Board, 113
    U.S. National Committee for the International Council for Building Research, Studies and Documentation, 125
  National Constructors Association, 131
  National Electrical Manufacturers Association, 132
  Portland Cement Association, 152
  Structural Engineers Association of California, 175
  U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193

Cable, *see* Wire and Cable

Cadastral Surveying, *see* Surveying

Camellias
  American Camellia Society, 7
  Norfolk Botanical Garden, 139

Cancer
  American Cancer Society, Inc., 8
  Hazelton Laboratories, Inc., 79
  High Voltage Engineering Corp., 80
  Public Health Federation of the Cincinnati Area, 154
  U.S. Department of Health, Education, and Welfare. Public Health Service, 206
  U.S. Veterans Administration. VA Cancer Registry, 235
  University of Pennsylvania. Wistar Institute Library, 260

Canning, *see* Food Technology

Cardiology and Cardiovascular Diseases, *see* Medicine

Cartography
  American Geographical Society, 14
  American Society of Civil Engineers, 28
  Columbia University. Geology Library and University Map Room, 57
  Franklin Institute. Laboratories for Research and Development, 70
  U.S. Department of Commerce. Coast and Geodetic Survey. Office of Cartography, 189
  U.S. Department of the Interior. Geological Survey, 221
  University of Illinois. Map and Geography Library, 246
  The University of Texas. Bureau of Economic Geology, 263

Casting
  Alloy Casting Institute, 5
  American Foundrymen's Society, 13
  American Zinc Institute, Inc., 30
  Bethlehem Steel Co. Homer Research Laboratories, 42
  Mueller Brass Co., 110
  Reynolds Metals Co. Technical Information Center, 159
  Steel Founders' Society of America, 174
  U.S. Department of the Interior. Bureau of Mines. Norris Metallurgy Research Laboratory, 211

Castor Oil
  Baker Castor Oil Co., 38

Catalysts and Catalysis
  American Oil Co., 21
  Cheminform Institute, 53
  General Aniline and Film Corp. Central Research Laboratory, 72
  General Aniline and Film Corp. Research and Development Laboratory, 72
  Sun Oil Co. Research and Development Library, 176
  Universal Oil Products Co. Research Library, 235

Cathodic Protection, *See* Corrosion

Cellulose
  American Society for Testing and Materials, 26
  Hercules Research Center, 80
  The Institute of Paper Chemistry, 87
  Rayonier, Inc., 156

Cement
  American Society for Testing and Materials, 26
  Battenfeld Grease and Oil Corp., 41
  Massachusetts Institute of Technology. Materials Research Laboratory, 103
  Portland Cement Association, 152

Ceramics
  American Ceramic Society, Inc., 8
  American Society for Testing and Materials, 26
  Battelle Memorial Institute. Library, 40
  Carborundum Co., 49
  Georgia Institute of Technology:
    Price Gilbert Memorial Library, 74
    Technical Information Section, 74
  Illinois Institute of Technology. IIT Research Institute, 81
  Iowa State University of Science and Technology. Institute for Atomic Research, 90
  Metcut Research Machining Information Center, 105
  National Lead Co. Titanium Alloy Manufacturing Division, 133
  Ohio State University. Lord Hall Library, 145
  Rutgers—The State University. Central Library, 161
  A. O. Smith Corp., 164
  Society for Nondestructive Testing, 168
  U.S. Department of Commerce. National Bureau of Standards. Inorganic Materials Division, 194
  U.S. Department of Defense. Department of the Air Force. Air Force Materials Laboratory (MAAM), 203
  U.S. Department of the Interior.
    Bureau of Mines:
      Albany Metallurgy Research Center, 208
      College Park Metallurgy Research Center, 209
      Norris Metallurgy Research Laboratory, 221
  University of Dayton. Research Institute, 242
  University of Toledo. Library, 265
  Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Cereals
  Doty Laboratories, 62
  General Mills, Inc. Central Research Libraries, 73
  U.S. Department of Agriculture. Agricultural Research Service. Northern Utilization Research and Development Division, 83

Cermets, *see* Powder Metallurgy

Chemical Engineering
  Allied Chemical Corp. Central Research Laboratory, 4
  American Chemical Society, 8
  American Cyanamid Company, 10
  Arthur D. Little, Inc., 33
  Association of Consulting Chemists and Chemical Engineers, Inc., 34
  Battelle Memorial Institute. Library, 40
  Bethlehem Steel Co. Schwab Memorial Library, 43
  California Institute of Technology. Libraries, 47
  Carnegie Library of Pittsburgh, 50
  Case Institute of Technology, 50
  Celanese Corp. of America. Summit Research Laboratories, 52

Chemical Engineering—Continued
  Chemineer, Inc., 53
  Colgate-Palmolive Co., 55
  Columbia University. Engineering Library, 56
  Dearborn Chemical Co., 60
  E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
  Engineering Societies Library, 65
  Ethyl Corp. Chemical Research and Development Library, 66
  Foster D. Snell, Inc., 70
  Hercules Research Center, 80
  Humble Oil and Refining Co. Houston Research Library, 81
  The Institute of Paper Chemistry, 87
  Iowa State University of Science and Technology. Institute for Atomic Research, 90
  Louisiana State University. Chemistry Library, 98
  Massachusetts Institute of Technology. Science Library, 103
  Miles Laboratories, Inc., 109
  National Lead Co. Research Laboratories, 133
  Ohio State University. Charles Cutter Sharp Library of Chemistry, 144
  Owens-Illinois Glass Co. Technical Center and Research Library, 147
  Pennsalt Chemicals Corp., 149
  Princeton University. Engineering Library, 153
  Purdue University:
    Engineering Experiment Station, 155
    University Libraries and Audio Visual Center, 156
  Science Communication, Inc., 163
  Socony Mobil Oil Co., Inc. Virginia Carolina Chemical Co., 169
  Southern Research Institute, 171
  Standard Ultramarine and Color Co., 171
  Stanford Research Institute. Research Information Center, 172
  Sun Oil Co. Research and Development Library, 176
  Tennessee Valley Authority. Technical Library, 177
  University of California, Los Angeles. Engineering and Mathematical Sciences Library, 239
  University of Dayton. University Library, 243
  University of Florida. Florida Engineering and Industrial Experiment Station, 244
  University of Houston. Libraries, 245
  University of Illinois. Chemistry Library, 245
  University of Maine. Technology Experiment Station, 248
  University of Michigan. Science and Engineering Libraries, 250
  University of New Hampshire. Engineering Experiment Station, 253
  University of Notre Dame. Chemistry-Physics Library, 255
  University of Pennsylvania. Towne Scientific Library, 260
  University of Rhode Island. Division of Engineering Research and Development, 262
  The University of Texas:
    Engineering Library, 264
    J. W. Mallet Chemical Library, 265
  University of Tulsa. Sidney Born Technical Library, 266

Chemical Engineering—Continued
  West Virginia University:
    Agriculture-Engineering Library, 273
    Engineering Experiment Station, 273
  Wyandotte Chemical Corp. Research Library and Technical Information Center, 275

Chemical Metallurgy, *see* Extractive Metallurgy

Chemical Properties, *see* Properties

Chemical Warfare
  Melpar, Inc. Technical Information Center, 105
  Science Communication, Inc., 163
  U.S. Department of Defense. Defense Documentation Center, 202
  University of Pennsylvania. Projects Summit and Spice Rack, 260

Chemistry
  Aerojet-General Corp.:
    Aerojet-General Nucleonics, 1
    Technical Libraries, 1
  American Bio-Synthetics Corp., 7
  American Ceramic Society, Inc., 8
  American Chemical Society, 8
  American Oil Chemist's Society, 20
  Arthur D. Little, Inc., 33
  Association of Consulting Chemists and Chemical Engineers, Inc., 34
  Atlantic Refining Co. Research and Development Department (Southwest Division), 35
  Auburn University. Library, 36
  Barium & Chemicals, Inc., 38
  Battelle Memorial Institute. Library, 40
  Brookhaven National Laboratory, 45
  Brooklyn College Library, 45
  Burroughs Corp. Defense and Space Group, 46
  California Institute of Technology. Libraries, 47
  Campbell Soup Co., 48
  Carnegie Library of Pittsburgh, 50
  Carrier Research & Development Co. Logan Lewis Library, 51.
  Carus Chemical Co. Permanganate Information Service, 51
  Case Institute of Technology, 51
  Chemical Rubber Publishing Co., 53
  Cheminform Institute, 53
  Colorado State University. University Libraries, 56
  Columbia University. Chemistry Library, 56
  Consumers Union of the United States, Inc., 59
  Duke University. Chemistry Library, 63
  E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
  Ethyl Corp.:
    Chemical Research Development Library, 66
    Ethyl Corp. Research Laboratories, 66
  Fisher Scientific Co., 68
  Ford Motor Co. Technical Information Section, 69
  Foster D. Snell, Inc., 70
  Franklin Institute. Library, 71
  General Aniline and Film Corp. Research Library, 73
  General Foods Corp., 73
  Gulf Coast Research Laboratory, 75

Chemistry—Continued
  Harvard University. Chemistry Library, 77
  Humble Oil and Refining Co. Houston Research Library, 81
  Institute for Scientific Information, 86
  Indiana University. Chemistry Library, 84
  The John Crerar Library, 92
  Johns Hopkins University. Chemical Propulsion Information Agency, 92
  Lilly Research Laboratories, 97
  Louisiana State University. Chemistry Library, 98
  Mallinckrodt Chemical Works. Library, 99
  Massachusetts Institute of Technology. Science Library, 103
  Mellon Institute, 105
  Melpar, Inc. Technical Information Center, 105
  Michigan Technological University. Library, 108
  Midwest Inter-Library Center, 108
  Miles Laboratories, Inc., 109
  Minnesota Mining and Manufacturing Co. 3M Technical Library, 109
  Nalco Chemical Co., 111
  The National Academy of Sciences—National Research Council. NAS-NRC Library, 122
  National Lead Co. Research Laboratories, 133
  National Reactor Testing Station. Technical Library, 134
  New York Academy of Medicine, 137
  New York Academy of Sciences, 137
  New York Public Library, 138
  Oak Ridge Gaseous Diffusion Plant, 141
  Oak Ridge Institute of Nuclear Studies, 141
  Oak Ridge National Laboratory. Oak Ridge National Laboratory Library, 142
  Ohio State University. Charles Cutter Sharp Library of Chemistry, 144
  Olin Mathieson Chemical Corp. Olin Research Center, 146
  Pineapple Research Institute of Hawaii, 151
  Polaroid Corp., 151
  Raytheon Co. Missile Systems Division Library, 157
  Republic Aviation Corp. Engineering Library, 158
  Republic Steel Corp. Research Center Library, 159
  Rutgers—The State University:
    Central Library, 161
    College of Pharmacy Library, 161
    College of South Jersey Library, 161
    Newark Colleges Library, 161
  A. O. Smith Corp., 164
  Smithsonian Institution. Science Information Exchange, 166
  Standard Ultramarine and Color Co., 171
  Sulphur Institute, 175
  Tempil Corp., 177
  Texas A & M University. Chemical Thermodynamic Properties Center, 177
  U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195
  U.S. Department of Defense:
    Defense Documentation Center, 202
    Department of the Air Force:
      Office of Aerospace Research, 203

Chemistry—Continued
- University of Arizona. Library, 236
- University of California, Berkeley. General Library, 238
- University of Colorado. Libraries, 242
- University of Dayton. University Library, 243
- University of Florida. Chemistry Library, 244
- University of Houston. Libraries, 245
- University of Illinois. Chemistry Library, 245
- University of Kentucky. University Libraries, 248
- University of Michigan. Science and Engineering Libraries, 250
- University of Nevada. Desert Research Institute, 252
- University of New Hampshire. Engineering Experiment Station, 253
- University of North Carolina. Chemistry Library, 254
- University of Notre Dame. Chemistry-Physics Library, 255
- University of Oklahoma. Chemistry Library, 255
- University of Pennsylvania. Towne Scientific Library, 260
- University of Puerto Rico. General Library, 261
- University of Southern Mississippi. Library, 263
- The University of Texas. J. W. Mallet Chemical Library, 265
- University of Washington:
  - Enviromental Health Division, 267
  - University Library, 268
- University of Wyoming. University Library, 269
- The Upjohn Co., 269
- Warner-Lambert Pharmaceutical Co. Warner-Lambert Research Institute, 270
- Western Reserve University. Freiberger Library, 272
- Westinghouse Electric Corp. Westinghouse Atomic Power Division, 272
- *See also* Agricultural Chemistry, Analytical Chemistry, Biochemistry, Catalysts and Catalysis, Electrochemistry, Fluorine Chemistry, Geochemistry, History of Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Radiochemistry, Spectrochemistry, *and* Surface Chemistry

Chemurgy
- The Chemurgic Council, 54

Chiropody
- Dr. Charles E. Krausz, 52

Chiropractic
- National Chiropractic Association, 131

Chlorine
- Chlorine Institute, Inc., 54

Chromatography
- Bell & Howell Co., 42
- Bio-Dynamic Farming & Gardening Association, Inc., 43
- Illinois Institute of Technology. Institute of Gas Technology, 81

Chromium
- Battelle Memorial Institute. Defense Metals Information Center, 39

Cinematography
- Technicolor Corp., 176

City Planning, *See* Urban Planning

Civil Engineering
- American Society of Civil Engineers, 28
- Arthur D. Little, Inc., 33
- Associated General Contractors of America, 33
- Automotive Safety Foundation, 36
- Bethlehem Steel Co. Schwab Memorial Library, 43
- Case Institute of Technology, 51
- Columbia University. Engineering Library, 56
- Duke University. College of Engineering Library, 63
- Engineering Societies Library, 65
- Humble Oil & Refining Co. Houston Research Library, 81
- Massachusetts Institute of Technology:
  - Department of Civil Engineering, 101
  - Engineering Library, 102
  - Joint Highway Research Project, 102
- Ohio State University. Aeronautical-Civil Engineering Library, 143
- Princeton University. Engineering Library, 153
- Purdue University:
  - Engineering Experiment Station, 155
  - University Libraries and Audio-Visual Center, 156
- Tennessee Valley Authority. Technical Library, 177
- U.S. Department of the Treasury. U.S. Coast Guard. Office of Engineering, 227
- University of California. Institute of Transportation and Traffic Engineering, 237
- University of Dayton. University Library, 243
- University of Houston. Libraries, 245
- University of Illinois. Engineering Library, 245
- University of Maine. Technology Experiment Station, 248
- University of Michigan. Science and Engineering Library, 250
- University of New Hampshire. Engineering Experiment Station, 253
- University of Notre Dame. Engineering Library, 255
- University of Pennsylvania. Towne Scientific Library, 260
- The University of Texas. Engineering Library, 264
- West Virginia University:
  - Agricultural-Engineering Library, 273
  - Engineering Experiment Station, 273

Clay
- American Ceramic Society, Inc., 8
- Expanded Shale, Clay, and Slate Institute, 67
- Georgia Institute of Technology. Technical Information Section, 74
- National Lead Co. Baroid Division, 133

Cleaning Compounds
- American Institute of Laundering, 17
- American Oil Chemists' Society, 20
- American Society for Testing and Materials, 26
- Colgate-Palmolive Co., 55
- Foote Mineral Co., 69
- Foster D. Snell, Inc., 70
- Pennsalt Chemicals Corp., 149
- Shulton, Inc., 164
- Wyandotte Chemical Corp. Research Library and Technical Information Center, 275

Climatology
- Aerophysics Research Foundation, 2
- American Geographical Society, 14
- American Society of Agronomy, 27
- Allen Weather Corp., 4
- American Meteorological Society, 19
- Ohio State University. Institute of Polar Studies, 145
- U.S. Department of Commerce. Weather Bureau, 201
- University of Arizona:
  - Institute of Atmospheric Physics, 236
  - Laboratory of Tree Ring Research, 236
- University of Colorado. Institute of Arctic and Alpine Research, 241
- University of Nevada. Desert Research Institute, 252
- *See also* Weather Modification

Cloud Physics, *see* Atmospheric Physics *and* Meteorology

Coal
- American Society for Testing and Materials, 26
- Consolidation Coal Co., 58
- National Coal Association, 13
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Anthracite Research Center, 208
    - Boulder City Metallurgy Research Laboratory, 209
    - Denver Mining Research Center and Coal Research Laboratory, 209
    - Morgantown Coal Research Center, 211
    - Office of Program Coordination, 211
    - Pittsburg Mining, Coal, and Explosives Research Center, 214
    - Seattle Coal Research Laboratory, 215
  - Office of Coal Research, 224
- University of Wyoming. Natural Resources Research Institute, 268
- West Virginia University. Bureau of Coal Research, 273

Coastal Engineering
- American Shore and Beach Preservation Association, 25
- Massachusetts Institute of Technology. Hydrodynamics Laboratory, 102
- Princeton University. River and Harbor Library, 154
- U.S. Department of Defense. Department of the Army. Coastal Engineering Research Center, 204
- University of Florida. Florida Engineering and Industrial Experiment Station, 244
- *See also* Harbors

Coatings
- Adhesive Products Corp., 1
- American Zinc Institute, Inc., 30
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Battenfeld Grease & Oil Corp., 41
- Bethlehem Steel Co. Homer Research Laboratories, 42
- Cheminform Institute, 53
- Foster D. Snell, Inc., 70
- Franklin Institute. Laboratories for Research and Development, 70
- Forest Products Research Society, 70
- Hercules Research Center, 80
- Illinois Institute of Technology. Institute of Gas Technology, 81

Coatings—Continued
- Karl M. Fox Consulting Research Service & Library, 93
- National Gallery of Art. Research Laboratory, 132
- National Paint, Varnish, and Lacquer Association, 134
- National Research Corp., 134
- Stein Engineering Services, Inc., 174
- Tempil Corp., 177
- U.S. Department of the Interior. Bureau of Reclamation, 215
- University of Dayton. Research Institute, 242
- *See also* Metal Plating

Cobalt
- Battelle Memorial Institute. Cobalt Information Center, 39
- University of Florida. Florida Engineering and Industrial Experiment Station, 244

Coffee
- Coffee Brewing Institute, Inc., 54

Coke, *see* Coal

Cold Regions, *see* Polar Research

Color
- American Oil Chemists' Society, 20
- Color Association of the U.S., Inc., 56
- Dry Color Manufacturers' Association, 63
- Illuminating Engineering Society, 83
- Standard Ultramarine & Color Co., 171
- Technicolor Corp, 176
- *See also* Dyes *and* Pigments

Columbium
- Battelle Memorial Institute. Defense Metals Information Center, 39

Combustion
- The Combustion Institute, 57
- Illinois Institute of Technology. Institute of Gas Technology, 81
- Johns Hopkins University. Chemical Propulsion Information Agency, 92
- Massachusetts Institute of Technology:
  - Aeronautics and Astronautics Library, 101
  - Fluid Mechanics Laboratory, 102
  - Fuels Research Laboratory, 102
- The National Academy of Sciences—National Research Council. Committee on Fire Research, 114
- National Coal Association. Bituminous Coal Research, Inc., 131
- Purdue University. Jet Propulsion Center, 155
- United Aircraft Corp. Research Library, 179
- U.S. Department of Commerce. National Bureau of Standards. Heat Division, 194
- U.S. Bureau of the Interior.
  - Bureau of Mines:
    - Morgantown Petroleum Research Laboratory, 211
    - Office of the Assistant Director, Health and Safety, 211
    - Pittsburgh Mining, Coal, and Explosives Research Centers, 214
- *See also* Explosion Phenomena

Command and Control Systems
- Aries Corp., 33
- Booz, Allen Applied Research, Inc., 44
- Princeton University. Aeronautical Engineering Library, 153
- System Development Corp., 176
- *See also* Guidance and Control Systems *and* Systems Analysis and Design

Communicable Diseases, *see* Medicine

Communications
- Anaconda Wire & Cable Co., 31
- Avco Corp.:
  - Ordnance Division, 37
  - Technical Communications Department, 37
- The Boeing Co. Aero-Space Division, 43
- Booz, Allen Applied Research Inc., 44
- California Institute of Technology. Jet Propulsion Laboratory, 47
- Federal Aviation Agency. Headquarters Library, 68
- Magnavox Co., 99
- Massachusetts Institute of Technology. Lincoln Laboratory, 103
- Melpar, Inc. Technical Information Center, 105
- National Electrical Manufacturers Association, 132
- New York Public Library, 138
- Ohio State University:
  - Antenna Laboratory Library, 143
  - Electrical Engineering Library, 144
- Raytheon Co.:
  - Communications and Data Processing Operations Library, 57
  - Submarine Signal Operations Iibrary, 158
  - Sudbury Operations Library, 158
- Republic Aviation Corp. Engineering Library, 158
- Smithsonian Institution. Astrophysical Observatory, 165
- Troxler Electronic Laboratories, Inc., 179
- U.S. Department of Commerce, National Bureau of Standards. Radio Systems Division, 198
- U.S. Department of Defense. Defense Documentation Center, 202
- *See also* Telemetry

Computer Science
- Argonne National Laboratory. ANS Argonne Code Center, 32
- Aries Corp., 33
- Avco Corp. Electronics Division, 37
- Bolt, Beranek, & Newman, Inc., 44
- Burroughs Corp. Electrodata Manufacturing and Engineering Division, 46
- Cambridge Communications Corp., 48
- Computer Concepts, Inc., 58
- Engineering Societies Library, 65
- Fluidyne Engineering Corp., 69
- Franklin Institute:
  - Computing Center, 70
  - Laboratories for Research and Development, 70
- George Washington University. Logistics Research Project, 74
- Georgia Institute of Technology:
  - Rich Electronic Computer Center, 74
  - Technical Information Section, 74

Computer Science—Continued
- International Business Machines Corp.:
  - Data Processing Program Information Department, 89
  - Thomas J. Watson Research Center Library, 89
- Iowa State University of Science and Technology. Statistical Laboratory, 91
- Massachusetts Institute of Technology:
  - Computation Center, 101
  - Joint Highway Research Project, 102
- National Biomedical Research Foundation, 130
- Ohio State University. Antenna Laboratory Library, 143
- Princeton University. Engineering Library, 153
- Purdue University. Computer Sciences Center, 155
- The Science Bureau of the Metropolitan Washington Board of Trade, 163
- A. O. Smith Corp., 164
- System Development Corp., 176
- Tennessee Valley Authority. Technical Library, 177
- Texas A. & M. University. Cushing Memorial Library, 177
- University of California, Berkeley. Computer Center, 238
- University of California, Los Angeles:
  - Engineering and Mathematical Sciences Library, 239
  - Numerical Analysis Research Library, 240
- University of Colorado. Engineering Research Center, 241
- University of Dayton. University Library, 243
- University of Florida. Computing Center, 244
- University of Illinois. Mathematics Library, 246
- University of North Carolina. Computation Center, 254
- University of Notre Dame. Mathematics and Computing Science Library, 255
- University of Michigan. Science and Engineering Libraries, 250
- University of Oklahoma. Computation Center, 256
- University of Oklahoma. Mathematics Library, 256
- University of Pennsylvania. Moore School of Electrical Engineering Library, 259
- The University of Texas. Computation Center, 264
- University of Washington. Computer Center, 267
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
- *See also* Data Processing, Documentation, Information Storage and Retrieval, *and* Machine Translation

Conchology
- Buffalo Museum of Science, 45
- Stanford University. Branner Geological Library, 172

Concrete
- American Concrete Institute, 10
- American Society for Testing and Materials, 26
- Purdue University. Joint Highway Research Project, 155
- Stow Manufacturing Co., 174
- U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Spokane Mining Research Laboratory, 215
  - Bureau of Reclamation, 215
- University of Florida. Florida Engineering and Industrial Experiment Station, 244

Conservation
- American Forest Products Industries, Inc., 12
- American Forestry Association, 12
- American Pulpwood Association, 24
- American Shore & Beach Preservation Association, 25
- American Society of Agronomy, 27
- National Audubon Society, 129
- National Wildlife Federation, 136
- Ohio State University.
  - Botany and Zoology Library, 144
  - Natural Resources Institute, 145
- Purdue University. Agricultural Information Department, 154
- Rutgers—The State University. New Jersey College of Agriculture Library, 161
- U.S. Department of the Interior.
  - Bureau of Land Management, 207
  - Bureau of Reclamation, 215
  - Division of Information, Office of the Secretary, 216
  - Fish and Wildlife Service:
    - Bureau of Sport Fisheries and Wildlife, 217
  - Library, 222
  - National Park Service, 223
- University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
- University of Wyoming. Jackson Hole Biological Research Station, 268
- Wildlife Management Institute, 274
- *See also* Natural Resources, Soil Conservation, Water Conservation, *and* Wildlife

Construction, *see* Building Technology

Construction Materials, *see* Building Materials

Consumer Products
- Consumers Union of the United States, 59

Containers, *see* Packaging

Contraceptives
- Margaret Sanger Research Bureau, 100
- The Population Council, 151

Copper
- American Bureau of Metal Statistics, 7
- Copper Development Association, Inc., 59
- Michigan Technological University. Institute of Mineral Research, 107
- Mueller Brass Co., 110
- U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209
- U.S. Department of the Treasury. Bureau of the Mint, 226

Copyright
- George Washington University. Patent, Trademark, and Copyright Foundation, 74

Cores
- Illinois State Geological Survey, 82
- Paleontological Research Institution, 148
- University of Michigan:
  - Museum of Paleontology, 250
  - Subsurface Laboratory and Core Library, 251
- University of Oklahoma. Core Library, 256

Cores—Continued
- The University of Texas. Bureau of Economic Geology, 263

Corrosion
- Allegheny Ludlum Steel Corp. Research Center Library, 4
- American Oil Co., 21
- American Zinc Institute, Inc., 30
- Bethlehem Steel Co. Homer Research Laboratories, 42
- Carus Chemical Co. Permanganate Information Service, 51
- Cyrus Wm. Rice & Co., 60
- Dearborn Chemical Co., 60
- International Nickel Co., Inc., 89
- Nalco Chemical Co., 111
- The National Academy of Sciences—National Research Council. Building Research Advisory Board, 113
- National Association of Corrosion Engineers, 129
- National Lead Co. Baroid Division, 133
- Oak Ridge Gaseous Diffusion Plant, 141
- Petrolite Corp. Library and Information Retrieval Center, 150
- Reynolds Metals Co. Technical Information Center, 159
- U.S. Department of the Interior.
  - Bureau of Mines:
    - College Park Metallurgy Research Center, 209
  - Bureau of Reclamation, 215
  - Office of Saline Water, 225
- University of Florida. Florida Engineering and Industrial Experiment Station, 244
- Virginia Institute for Scientific Research, 269
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
- *See also* Deterioration

Cosmetics
- Cheminform Institute, 53
- Colgate-Palmolive Co., 55
- Fine Organics, Inc., 68
- Foster D. Snell, Inc., 70
- Harris Research Laboratories, Inc., 76
- Purdue University. Trace Level Research Institute, 156
- Revlon Research Center, Inc., 159
- Shulton, Inc., 164
- Society of Cosmetic Chemists, 168
- U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227
- The University of Texas. Pharmacy Library, 265

Cosmic rays
- Indiana University. Astronomy-Physics-Mathematics Library, 83
- Smithsonian Institution. Astrophysical Observatory, 165
- The National Academy of Sciences—National Research Council:
  - U.S. National Committee for International Years of the Quiet Sun, 125
  - World Data Center A, 126

Cotton
- Texas A & M University. Cottonseed Products Research Laboratory, 177

Cotton—Continued
- U.S. Department of Agriculture. Agricultural Research Service. Southern Utilization Research and Development Division, 183
- The University of Texas. Cotton Economic Research, 264

Cryogenics
- The Boeing Co. Aero-Space Division, 43
- Duke University. Mathematics-Physics Library, 64
- International Nickel Co., Inc., 89
- National Research Corp., 134
- Ohio State University. Cole Memorial Library of Physics, 144
- Philips Laboratories, 150
- TRW Space Technology Laboratories, 179
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Boulder Laboratories Library, 193
    - Cryogenic Data Center, 193
    - Heat Division, 194
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Helium Research Center, 210
    - Office of the Assistant Director, Health and Safety, 211
- University of Colorado. Engineering Research Center, 241
- University of Illinois. Physics Library, 246
- University of Michigan. Infrared Information and Analysis Center, 249
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Crystallography
- Cambridge Communications Corp., 48
- Carborundum Co., 49
- Columbia University. Geology Library and University Map Room, 57
- Harvard University. Geological Sciences Library, 77
- Manlabs, Inc., 100
- Mineralogical Society of America, 109
- National Lead Co. Titanium Division, 133
- New York Microscopical Society, 138
- Philips Laboratories, 150
- Stanford University. Branner Geological Library, 172
- U.S. Department of Commerce. National Bureau of Standards. Metallurgy Division, 195
- U.S. Department of the Interior. Geological Survey, 221
- University of California, Los Angeles. Chemistry Research Library, 239
- University of North Carolina. Geology Library, 254
- University of Toledo. Library, 265
- Virginia Institute for Scientific Research, 269

Cytology
- American Cancer Society, Inc., 8
- American Society of Agronomy, 27
- Cedars of Lebanon Hospital, 51
- Columbia University:
  - Biological Sciences Library, 56
  - Medical Library, 57
- Duke University. Biology-Forestry Library, 63
- Harvard University. Biology Library, 76

Cytology—Continued
- Potato Association of America, 152
- University of North Carolina. Zoology Library, 254
- University of Pennsylvania:
  - Biology Library, 257
  - Wistar Institute Library, 260
- The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263

Dairy Science
- Dairy & Food Industries Supply Association, 60
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Michigan State University. Agricultural Experiment Station, 107
- Nopco Chemical Co., 139
- Ohio Agricultural Experiment Station, 143
- Texas A & M University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture. Cooperative State Research Service, 184
- University of Florida. Agricultural Experiment Station, 243
- University of Illinois. Illinois Agricultural Experiment Station, 246
- University of Kentucky. Agricultural Experiment Station, 247
- University of Rhode Island. Agricultural Experiment Station, 262
- University of Wyoming. Agricultural Experiment Station, 268

Data Processing
- American Documentation Institute, 11
- American University. Center for Technology and Administration, 30
- Aries Corp., 33
- Battelle Memorial Institute. Information Research Center, 40
- Booz, Allen Applied Research Inc., 44
- Burroughs Corp. Defense and Space Group, 46
- Computer Concepts, Inc., 58
- Federal Aviation Agency. National Aviation Facilities Experimental Center, 68
- Franklin Institute. Computing Center, 70
- George Washington University. Logistics Research Project, 74
- Georgia Institute of Technology. Rich Electronic Computer Center, 74
- International Business Machines Corp.:
  - Data Processing Program Information Department, 89
  - Thomas J. Watson Research Center Library, 89
- Massachusetts Institute of Technology:
  - Lincoln Laboratory, 103
  - Computation Center, 101
- Mead Johnson & Co., 104
- Ohio State University. Antenna Laboratory Library, 143
- Raytheon Co. Communications and Data Processing Operations Library, 157
- Republic Aviation Corp. Engineering Library, 158

Data Processing—Continued
The Science Bureau of the Metropolitan Washington Board of Trade, 163
Science Communication, Inc., 163
A. O. Smith Corp., 164
System Development Corp., 176
U.S. Department of Commerce.
Coast and Geodetic Survey:
Office of the Physical Sciences, 190
National Bureau of Standards:
Information Technology Division, 194
U.S. Department of Defense. Defense Documentation Center, 202
U.S. Veterans Administration:
Department of Data Management, 229
Medical and General Reference Library, 229
University of Oklahoma. Computation Center, 256
See also Computer Science, Documentation, *and* Information Storage and Retrieval

Deafness
Alexander Graham Bell Association for the Deaf, Inc., 3
Gallaudet College:
Edward Miner Gallaudet Memorial Library, 72
Linguistics Research Laboratory, 72

Dental Materials
American Dental Association, 10
Indiana University. School of Dentistry Library, 84
U.S. Department of Commerce. National Bureau of Standards. Polymers Division, 197

Dentifrices
Colgate-Palmolive Co., 55

Dentistry
American Academy of Implant Dentures, 5
American Dental Association, 10
Columbia University. Medical Library, 57
Delaware Academy of Medicine, 60
Denver Medical Society, 61
Indiana University. School of Dentistry Library, 84
National Association of Dental Laboratories, Inc., 129
New York Academy of Medicine, 137
New York University. New York University Libraries, 138
Ohio State University. Health Center Library of Medicine, 144
Texas Medical Center Library, 178
U.S. Department of Commerce. National Bureau of Standards. Polymers Division, 197
U.S. Department of Health, Education, and Welfare. Public Health Service, 206
U.S. Veterans Administration. Medical and General Reference Library, 229
University of California, Los Angeles. Biomedical Library, 239
University of Colorado. Medical Center, 242
University of Kentucky. Medical Center, 247
University of Michigan. Dentistry Library, 248
University of North Carolina. Division of Health Affairs, 254
University of Pennsylvania. Evans Dental Library, 258
The University of Texas. Dental Branch Library, 264

Dentistry—Continued
University of Washington. University Library, 268
Western Reserve University. Freiberger Library, 272
S. S. White Dental Manufacturing Co., 274
See also History of Dentistry *and* Oral Surgery

Deodorizers
Marine Chemurgics, Inc., 100

Dermatology
College of Physicians of Philadelphia, 55
Columbia University. Medical Library, 57
Noah Worcester Dermatological Society, Inc., 139
The National Academy of Sciences—National Research Council. Committee on the Cutaneous System, 117
Shulton, Inc., 164

Desert Research
University of California, Riverside. University Library, 240
University of Nevada:
Agricultural Experiment Station, 252
Biology Museum and Research Laboratories, 252
Desert Research Institute, 252

Detergents, *see* Cleaning Compounds

Deterioration
Battelle Memorial Institute. Electronic Component Reliability Center, 39
The National Academy of Sciences—National Research Council. Prevention of Deterioration Center, 124
U.S. Department of the Interior. Bureau of Mines. Bartlesville Petroleum Research Center, 209
See also Corrosion

Diamonds
Engelhard Industries, Inc., 65

Dielectrics
Cambridge Communications Corp., 48
Ion Physics Corp., 89
The National Academy of Sciences—National Research Council. Conference on Electrical Insulation, 118
National Lead Co. Titanium Alloy Manufacturing Division, 133
U.S. Department of Commerce. National Bureau of Standards. Electricity Division, 193
Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Dies, *see* Casting

Dietetics, *see* Nutrition

Distilled Spirits
Distilled Spirits Institute, Inc., 62
Rutgers—The State University. Center of Alcohol Studies, 160
U.S. Department of the Treasury:
Bureau of Customs, 225
Internal Revenue Service. National Office Laboratory, 227
University of Puerto Rico. Puerto Rico Agricultural Experiment Station, 262

Documentation
- American Documentation Institute, 11
- American Ordnance Association, 21
- Information for Industry, Inc., 85
- Institute for Scientific Information, 86
- The National Academy of Sciences—National Research Council. Office of Documentation, 123
- Purdue University. Computer Sciences Center, 155
- The Science Bureau of the Metropolitan Washington Board of Trade, 163
- Science Communication, Inc., 163
- Western Reserve University. Center for Documentation, 271
- *See also* Computer Science, Data Processing, *and* Information Storage and Retrieval

Drainage
- American Society of Civil Engineers, 28
- American Society of Sanitary Engineering, 29
- U.S. Department of Agriculture. Soil Conservation Service, 187
- U.S. National Committee of the International Commission of Irrigation and Drainage, 228
- *See also* Irrigation

Drugs, *see* Pharmaceutical Science *and* Pharmacology

Dyes
- American Association of Textile Chemists and Colorists, 6
- Cheminform Institute, 53
- E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
- General Aniline & Film Corp. Rensselaer Library and Technical Information Service, 72
- Standard Ultramarine and Color Co., 171
- U.S. Department of the Treasury. Bureau of Customs, 225
- *See also* Pigments

Earth Sciences
- Academy of Natural Sciences of Philadelphia, 1
- American Geological Institute, 15
- National Lead Co. Baroid Division, 133
- New York Public Library, 138
- Smithsonian Institution. Science Information Exchange, 166
- Texas Instruments, Inc. Corporate Technical Information Center, 178
- U.S. Department of Defense:
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - Office of Aerospace Research, 203
- University of California, Berkeley. General Library, 238
- University of Houston. Libraries, 245
- University of Colorado. Libraries, 242
- University of Nevada. Mackay School of Mines, 252
- *See also* Geography, Geodesy, Geology, Geophysics, Meteorology, *and* Oceanography

Ecology
- Academy of Natural Sciences of Philadelphia, 1
- American Museum of Natural History, 19
- American Society of Agronomy, 27

Ecology—Continued
- Bio-Dynamic Farming and Gardening Association, Inc., 43
- Carnegie Institution of Washington. Department of Plant Biology, 50
- Duke University:
  - Biology-Forestry Library, 63
  - Marine Laboratory, 64
- Gulf Coast Research Laboratory, 75
- Harvard University. Biology Laboratories, 76
- Highlands Biological Station, Inc., 80
- Institute for Fisheries Research, 85
- McLean Paleontological Laboratory, 99
- The National Academy of Sciences—National Research Council. Office of the Foreign Secretary, 123
- Ohio State University:
  - Botany and Zoology Library, 144
  - Natural Resources Institute, 145
  - Ohio Cooperative Wildlife Research Unit, 146
- Pacific Vegetation Project, 148
- Smithsonian Institution. Canal Zone Biological Area, 166
- U.S. Department of the Interior.
  - Fish and Wildlife Service:
    - Bureau of Commercial Fisheries, 217
  - Geological Survey, 221
- University of Colorado. Institute of Arctic and Alpine Research, 241
- University of Pennsylvania. Biology Library, 257
- University of Puerto Rico. Institute of Marine Biology, 261
- University of Wyoming. Jackson Hole Biological Research Station, 268

Electrical Engineering
- Aircraft Technical Service, Inc., 3
- American Society for Metals, 25
- Avco Corp. Electronics Division, 37
- Battelle Memorial Institute. Library, 40
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Burrough Corp. Defense and Space Group, 46
- Carrier Research and Development Co., 51
- Case Institute of Technology, 51
- Columbia University. Engineering Library, 56
- Copper Development Association, Inc. Library, 59
- Duke University. College of Engineering Library, 63
- Dynatronics, Inc., 65
- Engineering Societies Library, 65
- Ford Motor Co. Technical Information Section, 69
- Illinois Institute of Technology. IIT Research Institute, 81
- Illuminating Engineering Society, 83
- Magnavox Co., 99
- Massachusetts Institute of Technology. Engineering Library, 102
- National Electrical Manufacturers Association, 132
- Ohio State University. Electrical Engineering Library, 144
- Princeton University. Engineering Library, 153
- Purdue University:
  - Engineering Experiment Station, 155
  - University Libraries and Audio- Visual Center, 156

Electrical Engineering—Continued
Raytheon Co.:
Communications and Data Processing Operations Library, 157
Research Division Library, 157
Santa Barbara Operations Library, 157
Submarine Signal Operations Library, 158
Sudbury Operations Library, 158
Republic Aviation Corp., 158
A. O. Smith Corp., 164
Southern Research Institute, 171
Tennessee Valley Authority. Technical Library, 177
U.S. Department of Defense.
Defense Documentation Center, 202
Department of the Army:
Plastics Technical Evaluation Center, 204
U.S. Department of Commerce. National Bureau of Standards. Electricity Division, 193
U.S. Department of the Interior. Bonneville Power Administration, 207
University of California, Los Angeles. Engineering and Mathematical Sciences Library, 239
University of Dayton. University Library, 243
University of Florida. Florida Engineering and Industrial Experiment Station, 244
University of Houston. Libraries, 245
University of Illinois. Engineering Library, 245
University of Maine. Technology Experiment Station, 248
University of Michigan. Science and Engineering Libraries, 250
University of New Hampshire. Engineering Experiment Station, 253
University of Notre Dame. Engineering Library, 255
University of Pennsylvania. Moore School of Electrical Engineering Library, 259
The University of Texas. Engineering Library, 264
Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
West Virginia University:
Agriculture-Engineering Library, 273
Engineering Experiment Station, 273
See also Illumination

Electrical Insulation, *see* Insulation

Electrical Properties, *see* Properties

Electric Power
Anaconda Wire & Cable Co., 31
Edison Electric Institute, 65
Georgia Institute of Technology. Technical Information Section, 74
Ion Physics Corp., 89
National Coal Association, 131
New York Public Library, 138
Princeton University. Plasma Physics Laboratory Library, 153
U.S. Department of the Interior:
Bonneville Power Administration, 207
Bureau of Reclamation, 215
See also Rural Electrification

Electroacoustics, *see* Acoustics

Electrochemistry
Battelle Memorial Institute. Fuel Cell Information Index, 39
Indiana University. Chemistry Library, 84
Manlabs, Inc., 100
Raytheon Co. Semiconductor Division Technical Library, 157
Stanford University. Swain Library of Chemistry, 173
U.S. Department of Commerce.
National Bureau of Standards:
Analytical Chemistry Division, 192
Electricity Division, 193
University of California, Los Angeles. Chemistry Research Library, 239
University of Pennsylvania. Power Information Center, 259

Electroencephalography, *see* Electrophysiology

Electromagnetics
Carl A. Bays & Associates, Inc., 49
Ohio State University:
Antenna Laboratory Library, 143
Electrical Engineering Library, 144
U.S. Department of Commerce. National Bureau of Standards. Radio Systems Division, 198
University of North Carolina. Mathematics-Physics Library, 254
University of Pennsylvania. Power Information Center, 259

Electrometallurgy, *see* Extractive Metallurgy

Electron Devices
Stanford University. Stanford Electronic Laboratories, 173
Texas Instruments, Inc. Corporate Technical Information Center, 178
U.S. Department of Commerce. National Bureau of Standards. Electron Devices Data Service, 193

Electronic Data Processing, *see* Data Processing

Electronic Properties, *see* Properties

Electronics
Aerojet-General Corp. Corporate Technical Information Center, 1
All-Tronics, Inc., 5
American Ordnance Association, 21
American Society for Quality Control, 26
Atlantic Refining Co. Research and Development Department (Southwest Division), 35
Avco Corp.:
Ordnance Division, 37
Technical Communications Department, 37
Barnes Engineering Co., 38
Battelle Memorial Institute:
Electronic Component Reliability Center, 39
Library, 40
Beckman Instruments, Inc., 41
Bell & Howell Co., 42
Bell Helicopter Co., 42
The Boeing Co. Airplane Division—Wichita Branch, 44
Booz, Allen Applied Research, Inc., 44
Brookhaven National Laboratory, 45

Electronics—Continued
- Burroughs Corp. Defense and Space Group, 46
- Carborundum Co., 49
- Carrier Research and Development Co., 51
- Consumers Union of the United States, Inc., 59
- Copper Development Association, Inc., 59
- Derivation and Tabulation Associates, Inc., 61
- Duke University. Mathematics-Physics Library, 64
- Engineering Societies Library, 65
- Federal Aviation Agency. Aeronautical Center Library Service, 67
- Ford Motor Co. Technical Information Section, 69
- Hayes International Corp., 79
- Illinois Institute of Technology. IIT Research Institute, 81
- Institute for Scientific Information, 86
- Litton Systems, Inc. Applied Science Division Library, 97
- Magnavox Co., 99
- Massachusetts Institute of Technology. Lincoln Laboratory, 103
- Melpar, Inc. Technical Information Center, 105
- National Center for Atmospheric Research:
  - High Altitude Observatory Library, 130
  - NCAR Library, 130
- New York Public Library, 138
- New York University. Project SETE, 138
- Ohio State University. Antenna Laboratory Library, 143
- Philips Laboratories, 150
- Pickard & Burns, Inc., 150
- Princeton University:
  - Aeronautical Engineering Library, 153
  - Engineering Library, 153
- Purdue University. Engineering Experiment Station, 155
- Raytheon Co.:
  - Bedford Complex Library, 157
  - Communications and Data Processing Operations Library, 157
  - Missile Systems Division Library, 157
  - Santa Barbara Operations Library, 157
  - Semiconductor Division Technical Library, 157
  - Submarine Signal Operations Library, 158
  - Sudbury Operations Library, 158
  - Wayland Library, 158
- Republic Aviation Corp. Engineering Library, 158
- A. O. Smith Corp., 164
- Smithsonian Institution. Science Information Exchange, 166
- Stanford University. Stanford Electronic Laboratories, 173
- Technicolor Corp., 176
- Texas Instruments, Inc. Corporate Technical Information Center, 178
- Troxler Electronic Laboratories, Inc., 179
- United Aircraft Corp. Research Library, 179
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Electron Devices Data Center, 193
    - NBS Library, 195
    - Radio Standards Division, 197
    - Radio Systems Division, 198

Electronics—Continued
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - Office of Aerospace Research, 203
  - Department of the Army:
    - Plastics Technical Evaluation Center, 204
- U.S. Department of the Treasury. U.S. Coast Guard. Office of Engineering, 227
- University of California, Los Angeles. Engineering and Mathematical Sciences Library, 239
- University of Colorado. Engineering Research Center, 241
- University of Dayton. Research Institute, 242
- University of Florida. Florida Engineering and Industrial Experiment Station, 244
- University of Pennsylvania. Moore School of Electrical Engineering, 259
- University of Rhode Island. Division of Engineering Research and Development, 262
- University of Southern Mississippi. University Library, 263
- The University of Texas. Defense Research Laboratory, 264
- Westinghouse Electric Corp.:
  - Engineering Library, 272
  - Technical Information Center, 272
- Winzen Research, Inc., 274
- *See also* Semiconductors, Transistors, *and* Transducers

Electron Microscopy and Optics
- Hazleton Laboratories, Inc., 79
- Manlabs, Inc., 100
- Massachusetts Institute of Technology. Neurosciences Research Information Center, 103
- Philips Laboratories, 150
- University of Nevada. Biology Museum and Research Laboratories, 252
- The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263

Electrophysiology
- American Electroencephalographic Society, 11
- Massachusetts Institute of Technology. Neurosciences Research Information Center, 103

Electrostatics
- Ion Physics Corp., 89
- Petrolite Corp. Library and Information Retrieval Center, 150
- University of Pennsylvania. Power Information Center, 259.

Embryology
- Carnegie Institution of Washington. Department of Embryology, 49
- Duke University. Biology-Forestry Library Coatings, 63
- Harvard University. Biology Laboratories, 76
- Miami University. Zoology Museum, 107

Enamels, *see* Coatings

Energy Conversion
- Avco Corp. Avco-Everett Research Laboratory, 36
- Battelle Memorial Institute. Fuel Cell Information Index, 39

Energy Conversion—Continued
  Illinois Institute of Technology. Institute of Gas Technology, 81
  Ion Physics Corp., 89
  Melpar, Inc. Technical Information Center, 105
  Solar Energy Society. Technical Research Science Center, 170
  United Aircraft Corp. Research Library, 179
  U.S. Department of Defense. Department of the Air Force. Office of Aerospace Research, 203
  University of Pennsylvania. Power Information Center, 259
  Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Energy Resources
  Geosurveys, 75
  National Coal Association. Bituminous Coal Research, Inc., 131
  Resources for the Future, Inc., 159

Engineering
  Aerojet-General Corp.:
    Aerojet-General Nucleonics, 1
    Technical Library, 2
  Allis Chalmers Manufacturing Co., 5
  American Bio-Synthetics Corp., 7
  American Gear Manufacturers Association, 14
  American Industrial Hygiene Association, 16
  American Society of Tool and Manufacturing Engineers, 29
  Atlantic Refining Co. Research and Development Department (Southwest Division), 35
  Auburn University. Library, 36
  Battelle Memorial Institute. Library, 40
  The Boeing Co. Airplane Division—Wichita Branch, 43
  Booz, Allen Applied Research, Inc., 44
  Brookhaven National Laboratory, 45
  California Institute of Technology. Libraries, 47
  Consulting Engineers Council, 58
  E. I. DuPont De Nemours & Co., Inc. Technical Library—Louviers Branch, 65
  Engineering Societies Library, 65
  Federal Aviation Agency. Aeronautical Center Library Service, 67
  Franklin Institute. Library, 71
  Georgia Institute of Technology:
    Rich Electronic Computer Center, 74
    Technical Information Section, 74
  The John Crerar Library, 92
  Michigan Technological University. Library, 108
  Miles Laboratories, Inc., 109
  Minnesota Mining & Manufacturing Co. 3M Technical Library, 109
  New York Academy of Sciences, 137
  New York Public Library, 138
  New York University. New York University Libraries, 138
  Oak Ridge Gaseous Diffusion Plant, 141
  Oak Ridge Institute of Nuclear Studies, 141
  Polaroid Corp., 151
  Princeton University. Engineering Library, 153
  Raytheon Co. Missile Systems Division Library, 157

Engineering—Continued
  Rutgers—The State University. Central Library, 161
  The Science Bureau of Metropolitan Washington Bureau of Trade, 163
  Southern Methodist University. Science Library, 171
  Stanford Research Institute, 172
  Sulphur Institute, 175
  Texas A. & M. University:
    Cushing Memorial Library, 177
    Texas Engineering Experiment Station, 178
  U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195
  University of Arizona. Library, 236
  University of California, Berkeley. General Library, 238
  University of Colorado. Libraries, 242
  University of Florida. Engineering and Physics Library, 244
  University of Houston. Libraries, 245
  University of Kentucky. University Libraries, 248
  University of Nevada. Library, 252
  University of Oklahoma:
    Bureau of Water Resources Research, 255
    College of Engineering Library, 256
  University of Pennsylvania. Towne Scientific Library, 260
  University of Washington. University Library, 268
  See also Aeronautical Engineering, Automotive Engineering, Aviation Safety Engineering, Bioengineering, Chemical Engineering, Civil Engineering, Coastal Engineering, Electrical Engineering, High Voltage Engineering, Highway Engineering, Human Engineering, Hydraulic Engineering, Industrial Engineering, Marine Engineering, Mechanical Engineering, Radio Engineering, Safety Engineering, Sanitary Engineering, Structural Engineering, Traffic Engineering *and* Water-Supply Engineering

Engineering Psychology
  Bolt, Beranek, & Newman, Inc., 44
  Franklin Institute. Laboratories for Research and Development, 70

Entomology
  Academy of Natural Sciences of Philadelphia, 1
  American Institute of Physics, 17
  American Museum of Natural History, 19
  American Society of Sugar Beet Technologists, 29
  California Academy of Sciences, 46
  Colorado State University. University Libraries, 56
  Duke University. Biology-Forestry Library, 63
  Entomological Society of America, 66
  Hawaiian Entomological Association, 79
  Illinois Natural History Survey, 82
  Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
  Louisiana State University. Louisiana Agricultural Experiment Station, 98
  Ohio Agricultural Experiment Station, 143
  Ohio State University. Botany and Zoology Library, 144
  Pacific Coast Entomological Society, 148
  Pineapple Research Institute of Hawaii, 151
  Potato Association of America, 152

Entomology—Continued
Purdue University. Agricultural Information Department, 154
Rutgers—The State University. New Jersey College of Agriculture Library, 161
Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
Stanford University. Falconer Biology Library, 173
Sulphur Institute, 175
Texas A. & M. University. Texas Agricultural Experiment Station, 178
U.S. Department of Agriculture. National Agricultural Library, 185
University of California, Berkeley:
  General Library, 238
  Insect Diagnostic Service, 238
University of California, Riverside. University Library, 240
University of Florida. Agricultural Experiment Stations, 243
University of Illinois:
  Biology Library, 245
  Illinois Agricultural Experiment Station, 246
University of Kentucky. Agricultural Experiment Station, 247
University of Maine. Maine Agricultural Experiment Station, 248
University of Michigan. Museum of Zoology, 250
University of North Carolina:
  Agricultural Experiment Station, 253
  D. H. Hill Library, 254
University of Pennsylvania. Biology Library, 257
University of Rhode Island. Agricultural Experiment Station, 262
The University of Texas. Biology Library, 263
University of Wyoming. Agricultural Experiment Station, 268
West Virginia University. West Virginia Agricultural Experiment Station, 274

Enzymes
American Bio-Synthetics Corp., 7
Columbia University. Chemistry Library, 56
Institute for Muscle Disease, Inc., 86
Keever Starch Co., 93

Epidemiology
College of Physicians of Philadelphia, 55
The National Academy of Sciences—National Research Council. Follow-up Agency, 118
U.S. Department of Health, Education, and Welfare. Public Health Service, 206
University of Pittsburgh. Graduate School of Public Health Library, 261

Ethnology
Harvard University. Peabody Museum of Archaeology and Ethnology, 78
Miami University. Museum of Anthropology, 106
Museum of Northern Arizona, 111
Smithsonian Institution:
  Bureau of American Ethnology, 165

Ethnology—Continued
Smithsonian Institution—Continued
  United States National Museum:
    Museum of Natural History, 167
University of Colorado. Museum, 242

Explosion Phenomena
The Combustion Institute, 57
Science Communication, Inc., 163
U.S. Department of the Interior. Bureau of Mines. Office of the Assistant Director, Health and Safety, 211
University of Michigan. Vela Seismic Information Analysis Center, 251
See also Combustion

Explosives
Aerojet-General Corp. Corporate Technical Information Center, 1
Avco Corp. Ordnance Division, 37
E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
Franklin Institute. Laboratories for Research and Development Library, 70
Hercules Research Center, 80
Remington Arms Co., Inc. Supporting Research and Development Library, 158
U.S. Department of the Interior. Bureau of Mines. Pittsburgh Mining, Coal, and Explosives Research Center, 214

Extractive Metallurgy
Allegheny Ludlum Steel Corp. Research Center Library, 4
American Iron and Steel Institute, 18
Bethlehem Steel Co. Homer Research Laboratories, 42
Institute of Scrap Iron and Steel, Inc., 87
Michigan Technological University. Institute of Mineral Research, 108
U.S. Department of the Interior.
  Bureau of Mines:
    Albany Metallurgy Research Center, 208
    Anthracite Research Center, 208
    Boulder City Metallurgy Research Laboratory, 209
    College Park Metallurgy Research Center, 209
    Minneapolis Metallurgy Research Center, 211
    Norris Metallurgy Research Center, 211
    Pittsburgh Mining, Coal and Explosives Research Centers, 214
    Reno Metallurgy Research Center, 214
    Rolla Metallurgy Research Center, 214
    Salt Lake City Metallurgy Research Center, 214
    Tucson Metallurgy Research Laboratory, 215
    Tuscaloosa Metallurgy Research Center, 215

Eye Disease, *see* Opthalmology

Fallout
Consumers Union of the United States, 59
Isotopes, Inc., 91
Oak Ridge National Laboratory. Nuclear Safety Information Center, 142

Fats and Oils
  American Oil Chemists' Society, 20
  Archer-Daniels-Midland Co. T. L. Daniels Research Center, 32
  Baker Castor Oil Co., 38
  Colgate-Palmolive Co., 55
  Foster D. Snell, Inc., 70
  Marine Chemurgics, Inc., 100
  Nalco Chemical Co., 111
  National Paint, Varnish, and Lacquer Association, 134
  Shulton, Inc., 164
  Textron, Inc., 178
  U.S. Department of Agriculture.
    Agricultural Research Service:
      Eastern Utilization and Development Division, 183
      Southern Utilization and Development Division, 183
  U.S. Department of the Treasury:
    Bureau of Customs, 225
    Bureau of Engraving and Printing, 226
  University of Dayton. Research Institute, 242
Fermentation Processes
  Chas. Pfizer & Co., Inc. Medical Research Laboratory, 53
  U.S. Department of Agriculture. Agricultural Research Service. Northern Utilization and Development Division, 183
Fertility
  Margaret Sanger Research Bureau, 100
Fertilizers
  American Farm Research Association, 12
  American Society of Agronomy, 27
  Bio-Dynamic Farming & Gardening Association, Inc., 43
  California Fertilizer Association, 47
  Foster D. Snell, Inc., 70
  Louisiana State University. Louisiana Agriculture Experiment Station, 98
  National Canners Association, 130
  National Plant Food Institute, 134
  Potato Association of America, 152
  Sulphur Institute, 175
  Tennessee Valley Authority. Technical Library, 177
  U.S. Department of Agriculture. National Agricultural Library, 185
  U.S. Department of the Interior.
    Bureau of Mines:
      Grand Forks Lignite Research Laboratory, 210
      Office of the Assistant Director, Mineral Resource Development, 210
  U.S. Department of the Treasury. Bureau of Customs, 225
  University of Kentucky. Agricultural Experiment Station, 247
Fibers
  American Cyanamid Co., 10
  E. I. DuPont de Nemours & Co., Inc.:
    Technical Library, 64
    Technical Library—Chestnut Run Branch, 64
  Fiber Society, Inc., 68
  Forest Products Research Society, 70
  Harris Research Laboratories, Inc., 76
  Information for Industry, Inc., 85
Fibers—Continued
  The Institute of Paper Chemistry, 87
  Institute of Textile Technology, 88
  Rayonier, Inc., 156
  University of Dayton. Research Institute, 242
  The University of Texas. Cotton Economic Research, 264
  See also Cellulose *and* Cotton
Filtration, *see* Water Treatment
Fire Control
  American Ordnance Association, 21
Fire Protection
  American Iron & Steel Institute, 18
  American Petroleum Institute, 22
  U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193
  U.S. Department of the Interior.
    Bureau of Mines:
      Office of the Assistant Director, Health and Safety, 211
    National Park Service, 223
Fire Research
  The National Academy of Sciences—National Research Council. Committee on Fire Research, 114
  U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193
Fish, *see* Ichthyology
Fish Diseases, *see* Animal Pathology
Fisheries
  American Fisheries Society, 12
  Gulf Coast Research Laboratory, 75
  Institute for Fisheries Research, 85
  U.S. Department of the Interior. Fish and Wildlife Service, 216
  University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
  University of Rhode Island. Aquatic Sciences Information Retrieval Center, 262
  University of Washington. University Library, 268
  University of Wyoming. Jackson Hole Biological Research Station, 268
Fish Toxicants
  Chemical Insecticide Corp., 53
  U.S. Department of the Interior.
    Fish and Wildlife Service.
      Bureau of Sport Fisheries and Wildlife:
        Fish Control Laboratories, 219
        Fish-Pesticides Research Laboratory, 220
        Patuxent Wildlife Research Center, 218
        Sandy Hook Marine Laboratory, 220
Flavors
  Foster D. Snell, Inc., 70
  Shulton, Inc., 164
  U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227
Flexible Shafts
  Stow Manufacturing Company, 174
Flight Mechanics, *see* Aerodynamics

Flood Prevention and Control
- U.S. Department of Agriculture. Soil Conservation Service, 187
- U.S. Department of Defense. Department of the Army, Coastal Engineering Research Center, 204
- U.S. Department of the Interior. Bureau of Reclamation, 215
- U.S. National Committee of the International Commission on Irrigation and Drainage, 228
- University of California. Water Resources Center Archives, 238

Flotation
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Minneapolis Metallurgy Research Center, 210
    - Reno Metallurgy Research Center, 214
    - Salt Lake City Metallurgy Research Center, 214

Flow Meters, *see* Measuring Devices

Fluid Mechanics
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Harvard University:
  - George David Birkhoff Mathematical Library, 77
  - Gordon McKay Library of Engineering and Applied Physics, 77
- Illinois Institute of Technology. IIT Research Institute, 81
- Massachusetts Institute of Technology:
  - Aeronautics and Astronautics Library, 101
  - Department of Civil Engineering, 101
  - Fluid Mechanics Laboratory, 102
  - Hydrodynamics Laboratory, 102
- Oak Ridge Gaseous Diffusion Plant, 141
- Princeton University:
  - Aeronautical Engineering Library, 153
  - Engineering Library, 153
- United Aircraft Corp. Research Library, 179
- U.S. Department of Commerce. National Bureau of Standards. Mechanics Division, 195
- U.S. Department of the Interior. Bureau of Mines. San Francisco Petroleum Research Laboratory, 215
- The University of Texas. Defense Research Laboratory, 264
- *See also* Magnetohydrodynamics

Fluorescent Materials
- Ultra-Violet Products, Inc., 179

Fluoridation, *see* Water Treatment

Fluorine Chemistry
- Oak Ridge Gaseous Diffusion Plant, 141

Food Additives
- Hazleton Laboratories, Inc., 79
- Information for Industry, Inc., 85
- The National Academy of Sciences—National Research Council. Food Protection Committee, 119
- Purdue University. Trace Level Research Institute, 156
- Scientists' Institute for Public Information, 164
- Universal Oil Products Co. Research Library, 235

Food Sanitation
- Dairy and Food Industries Supply Association, 60
- Institute of Sanitation Management, 87

Food Sanitation—Continued
- The National Academy of Sciences—National Research Council. Committee on Sanitary Engineering and Environment, 116
- National Canners Association, 130
- U.S. Department of Health, Education, and Welfare. Public Health Service, 206

Food Technology
- American Dry Milk Institute, Inc., 11
- American Society for Quality Control, Inc., 26
- Campbell Soup Co., 48
- Cheminform Institute, 53
- Dairy and Food Industries Supply Association, 60
- Foster D. Snell, Inc., 70
- General Foods Corp., 73
- General Mills, Inc. Central Research Libraries, 73
- Georgia Institute of Technology. Technical Information Center, 74
- Hazleton Laboratories, Inc., 79
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- The John Crerar Library, 92
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Marine Chemurgics, Inc., 100
- Massachusetts Institute of Technology:
  - Department of Nutrition and Food Science, 102
  - Science Library, 103
- Meals for Millions Foundation, 104
- Michigan State University. Agricultural Experiment Station, 107
- The National Academy of Sciences—National Research Council. Food Protection Committee, 119
- National Canners Association, 130
- Pickle Packers International, Inc., 151
- Potato Assocation of America, 152
- Stanford Research Institute, 172
- Texas A & M University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture:
  - Agricultural Research Service, 181
  - Cooperative State Research Service, 184
  - National Agricultural Library, 185
- University of California, Davis. University Library, 238
- University of Florida. Agricultural Experiment Stations, 243
- University of Illinois. Illinois Agricultural Experiment Station, 246
- University of Maine. Maine Agricultural Experiment Station, 248
- University of Michigan. Science and Engineering Libraries, 250
- University of Puerto Rico. Puerto Rico Agricultural Experiment Station, 262

Forest Management
- American Forest Products Industries, Inc., 12
- American Forestry Association, 12
- American Pulpwood Association, 24
- California Redwood Association, 47

Forest Management—Continued
- Michigan Technological University. Ford Forestry Center, 107
- Tennessee Valley Authority. Technical Library, 177
- U.S. Department of the Interior. Bureau of Land Management, 207

Forest Products, *see* Wood

Forestry
- American Association of Nurserymen, Inc., 6
- American Forestry Association, 12
- American Pulpwood Association, 24
- Auburn University. Alabama Agricultural Experiment Station, 36
- California Redwood Association, 47
- Colorado State University. University Libraries, 56
- Duke University. Biology-Forestry Library, 63
- Forest Products Research Society, 70
- Highlands Biological Station, Inc., 80
- The Institute of Paper Chemistry, 87
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Michigan State University. Agricultural Experiment Station, 107
- Michigan Technological University:
  - Ford Forestry Center, 107
  - Library, 108
- Ohio Agricultural Experiment Station, 143
- Ohio State University. Ohio Cooperative Wildlife Research Unit, 146
- Purdue University:
  - Agricultural Information Department, 154
  - University Libraries and Audio-Visual Center, 156
- Rutgers—The State University. New Jersey College of Agriculture Library, 161
- Society of American Foresters, 168
- Tennessee Valley Authority. Technical Library, 177
- Texas A & M University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture:
  - Cooperative State Research Service, 184
  - National Agricultural Library, 185
- University of Arizona. Arizona Cooperatitve Wildlife Research Unit, 236
- University of California, Berkeley. General Library, 238
- University of Florida. Agricultural Experiment Station, 243
- University of Illinois. Illinois Agricultural Experiment Station, 246
- University of Maine. Maine Agricultural Experiment Station, 248
- University of New Hampshire. Agricultural Experiment Station, 253
- University of North Carolina:
  - Agricultural Experiment Station, 253
  - D. H. Hill Library, 254
- University of Rhode Island. Agricultural Experiment Station, 262

Forestry—Continued
- University of Washington. University Library, 268
- University of Wyoming. Agricultural Experiment Station, 268
- Western Pine Association, 271
- West Virginia University. West Virginia Agricultural Experiment Station, 274

Fossils, *see* Paleontology

Foundry Technology, *see* Casting

Fruit Crops, *see* Horticulture

Fuel Cells, *see* Energy Conversion

Fuels
- American Gas Association, 13
- American Society for Testing and Materials, 26
- Battelle Memorial Institute:
  - Fuel Cell Information Index, 39
  - Library, 40
- Bethlehem Steel Co. Homer Research Laboratories, 42
- Consolidation Coal Co., 58
- Federal Aviation Agency. Headquarters Library, 68
- Massachusetts Institute of Technology. Fuels Research Laboratory, 102
- National Coal Association, 131
  - Bituminous Coal Research, Inc., 131
- Republic Aviation Corp. Engineering Library, 158
- Sun Oil Co. Research & Development Library, 176
- United Aircraft Corp. Research Library, 179
- U.S. Department of Defense, Defense Documentation Center, 202
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Bartlesville Petroleum Research Center, 209
    - Morgantown Coal Research Center, 211
    - Pittsburgh Mining, Coal, and Explosives Research Center, 214
  - Office of Minerals and Solid Fuels, 224
- *See also* Coal, Petroleum, *and* Propellants and Propulsion

Fungi, *see* Mycology

Fungicides
- Chemical Insecticide Corp., 53
- The National Academy of Sciences—National Research Council. Prevention of Deterioration Center, 124
- National Canners Association, 130

Gages, *see* Measuring Devices

Galvanizing, *see* Metal Plating

Gas Chromatography, *see* Chromatography

Gas Dynamics
- Avco Corp. Avco-Everett Research Laboratory, 36
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- Purdue University. Jet Propulsion Center, 155
- Smithsonian Institution. Astrophysical Observatory, 165

Gas Industries
- U.S. Department of the Interior. Office of Oil and Gas, 225

Gas Technology
  American Gas Association, 13
  Carus Chemical Co. Permanganate Information Service, 51
  Illinois Institute of Technology. Institute of Gas Technology, 81
  O'Neill Geothermal, Inc., 147
  Massachusetts Institute of Technology. Fluid Mechanics Laboratory, 102
  U.S. Department of Commerce. National Bureau of Standards. Cryogenic Data Center, 193
  U.S. Department of the Interior.
    Bureau of Mines:
      Morgantown Coal Research Center, 211
      Pittsburgh Mining, Coal, and Explosives Research Center, 214
  See also Helium *and* Natural Gas

Gas Turbines
  Avco Corp. Lycoming Division, 37
  Massachusetts Institute of Technology. Fuels Research Laboratory, 102
  U.S. Department of the Interior. Bureau of Mines. Morgantown Coal Research Center, 211

Gears
  American Gear Manufacturers Association, 14
  U.S. Department of Defense. Department of the Army. Plastics Technical Evaluation Center, 204

Genetics
  American Genetic Association, 14
  American Society of Agronomy, 27
  American Society of Sugar Beet Technologists, 29
  Carnegie Institution of Washington. Department of Terrestrial Magnetism, 50
  Colorado State University. University Libraries, 56
  Columbia University:
    Biological Sciences Library, 56
    Medical Library, 57
  Duke University. Biology-Forestry Library, 63
  Gallaudet College. Edward Miner Gallaudet Memorial Library, 72
  Harvard University. Biology Laboratories, 76
  Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
  Potato Association of America, 152
  Texas A & M University. Texas Agricultural Experiment Station, 178
  U.S. Department of Agriculture. Cooperative State Research Service, 184
  U.S. Department of the Interior. Fish and Wildlife Service. Fish Genetics Laboratory, 220
  University of Kentucky. Agricultural Experiment Station, 247
  University of North Carolina:
    D. H. Hill Library, 254
    Zoology Library, 254
  University of Pennsylvania:
    Biology Library, 257
    Wistar Institute Library, 260

Genetics—Continued
  The University of Texas. Biology Library, 263
  West Virginia University. West Virginia Agricultural Experiment Station, 274

Geochemistry
  Arctic Institute of North America. Arctic Bibliography Project, 32
  Columbia University:
    Geology Library and University Map Room, 57
    Geoscience Library, 57
  Delaware Geological Survey, 61
  Indiana University. Geology Library, 84
  Massachusetts Institute of Technology:
    Department of Geology and Geophysics, 102
    Lindgren Library, 103
  Princeton University. Biology and Geology Library, 153
  Stanford University. Branner Geological Library, 172
  U.S. Department of the Interior. Geological Survey, 221
  University of California, Los Angeles. Geology-Geophysics Library, 239
  University of Illinois. Geology Library, 246
  University of Nevada. Desert Research Institute, 252
  University of Tulsa. Information Services Department, 266

Geodesy
  Franklin Institute. Laboratories for Research and Development, 70
  Ohio State University. Orton Memorial Library of Geology, 146
  Smithsonian Institution. Astrophysical Observatory, 165
  U.S. Department of Commerce. Coast and Geodetic Survey, 188
  U.S. Department of Defense. Department of the Navy. U.S. Naval Observatory, 205
  U.S. Department of the Interior. Geological Survey, 221

Geography
  American Geographical Society, 14
  Association of American Geographers, 34
  Bernice P. Bishop Museum, 42
  Columbia University. Geology Library and University Map Room, 57
  National Center for Atmospheric Research. NCAR Library, 130
  Pacific Vegetation Project, 148
  Rutgers—The State University. Newark Colleges Library, 161
  U.S. Department of Commerce. Coast and Geodetic Survey. Administrative and Technical Services Division, 188
  U.S. Department of the Interior:
    Geological Survey, 221
    Office of Geography, 224
  University of California, Riverside. University Library, 240
  University of Illinois. Map and Geography Library, 246
  University of Nevada. Nevada Mining Analytical Laboratory, 253

Geological Maps
- American Geographical Society, 14
- Columbia University. Geology Library and University Map Room, 57
- Kansas State Geological Survey, 93
- Ohio State University. Orton Memorial Library of Geology, 146
- Rennsselaer Polytechnic Institute, 158
- Stanford University. Branner Geological Survey, 172
- U.S. Department of the Interior:
  - Geological Survey, 221
  - National Park Service, 223
- University of Arizona. Arizona Bureau of Mines, 235
- University of Toledo. Library, 265

Geology
- American Geographical Society, 14
- American Geological Institute, 15
- American Museum of Natural History, 19
- Arctic Institute of North America. Arctic Bibliography Project, 32
- Arthur D. Little, Inc., 33
- Atlantic Refining Co. Research and Development Department (Southwest Division), 35
- Bernice P. Bishop Museum, 42
- Brookhaven National Laboratory, 45
- Brooklyn College. Library, 45
- Buffalo Museum of Science, 45
- California Academy of Sciences, 46
- California Institute of Technology. Libraries, 47
- Carl A. Bays & Associates, Inc., 49
- Carnegie Institution of Washington. Geophysical Laboratory, 50
- Colorado School of Mines Research Foundation, Inc., 56
- Columbia University. Geology Library and University Map Room, 57
- Cranbrook Institute of Science, 59
- Delaware Geological Survey, 61
- Engineering Societies Library, 65
- Geosurveys, 75
- Gulf Coast Research Laboratory, 75
- Harvard University. Geological Science Library, 77
- Humble Oil and Refining Co. Houston Research Library, 81
- Indiana University. Geology Library, 84
- Illinois Institute of Technology. IIT Research Institute, 81
- Illinois State Geological Survey, 82
- Institute for Scientific Information, 86
- The John Crerar Library, 92
- Kansas State Geological Survey, 93
- Louisiana State University. Main Library, 98
- Miami University. Geology Museum and Map Library, 106
- Massachusetts Institute of Technology:
  - Department of Geology and Geophysics, 102
  - Lindgren Library, 103
- Michigan Technological University. Library, 108
- Museum of Northern Arizona, 111
- The National Academy of Sciences—National Research Council. Office of the Foreign Secretary, 123
- National Lead Co. Baroid Division, 133
- New York Academy of Sciences, 137

Geology—Continued
- Ohio State University:
  - Institute of Polar Studies, 145
  - Orton Memorial Library of Geology, 146
- Princeton University. Biology and Geology Library, 153
- Purdue University. University Libraries and Audio-Visual Center, 156
- Rutgers—The State University:
  - Central Library, 161
  - Newark Colleges Library, 161
- San Diego Natural History Museum, 162
- Smithsonian Institution. Canal Zone Biological Area, 166
- Southern California Academy of Sciences, 170
- Stanford University. Branner Geological Library, 172
- Tennessee Valley Authority. Technical Library, 177
- U.S. Department of Agriculture. Soil Conservation Service, 187
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Applied Physics Laboratory, 208
  - Bureau of Reclamation, 215
  - Geological Survey, 221
  - National Park Service, 223
- University of Arizona. Arizona Bureau of Mines, 235
- University of California, Los Angeles. Geology-Geophysics Library, 239
- University of Colorado. Museum, 242
- University of Dayton. University Library, 243
- University of Illinois. Geology Library, 246
- University of Kentucky:
  - Kentucky Geological Survey, 247
  - University Libraries, 248
- University of Maine. Technology Experiment Station, 248
- University of Michigan:
  - Mineral Museum, 249
  - Museum of Paleontology, 250
  - Subsurface Laboratory and Core Library, 251
  - Vela Seismic Information Analysis Center, 251
- University of Nevada. Nevada Mining Analytical Center, 253
- University of North Carolina. Geology Library, 254
- University of Oklahoma:
  - Core Library, 256
  - Geology Library, 256
  - Palynology Research Center, 257
- University of Southern Mississippi. Library, 263
- The University of Texas:
  - Bureau of Economic Geology, 263
  - Geology Library, 264
- University of Tulsa:
  - Information Services Department, 266
  - Sidney Born Technical Library, 266
- University of Wyoming. University Library, 269
- Woods Hole Oceanographic Institution, 274
- *See also* Geodesy, Geomorphology, Glaciology, Hydrology, Mineralogy, Oceanography, Paleontology, Petrology, *and* Sedimentation

Geomagnetism
- Carnegie Institution of Washington. Department of Terrestrial Magnetism, 50

Geomagnetism—Continued
The National Academy of Sciences—National Research Council:
U.S. National Committee for International Years of the Quiet Sun, 125
World Data Center A, 126
U.S. Department of Commerce.
Coast and Geodetic Survey:
Office of Physical Sciences, 190
National Bureau of Standards:
Ionosphere Research and Propagation Division, 195

Geomorphology
U.S. Department of the Interior. Geological Survey, 221
University of Colorado. Institute of Arctic and Alpine Research, 241
University of North Carolina. Geology Library, 254

Geophysics
Arctic Institute of North America. Arctic Bibliography Project, 32
Arthur D. Little, Inc., 33
Atlantic Refining Co. Research and Development Department (Southwest Division), 35
Carl A. Bays & Associates, Inc., 49
Carnegie Institution of Washington:
Department of Terrestrial Magnetism, 50
Geophysical Laboratory, 50
Columbia University:
Geology Library and University Map Room, 57
Geoscience Library, 57
Engineering Societies Library, 65
Geo-Science, Inc., 75
Harvard University. Geological Science Library, 77
Humble Oil & Refining Co. Houston Research Library, 81
Indiana University. Geology Library, 84
Massachusetts Institute of Technology. Lindgren Library, 103
Michigan Technological University. Institute of Mineral Research, 107
The National Academy of Sciences—National Research Council:
Geophysics Research Board, 119
U.S. National Committee for International Years of the Quiet Sun, 125
World Data Center A, 126
National Center for Atmospheric Research:
High Altitude Observatory Library, 130
NCAR Library, 130
Ohio State University. Institute of Polar Studies, 145
Science Communication, Inc., 163
Smithsonian Institution. Astrophysical Observatory, 165
Solar Energy Society. Technical Research Science Center, 170
Stanford University. Branner Geological Library, 172
U.S. Department of Commerce. Coast and Geodetic Survey, 188
U.S. Department of the Interior. Geological Survey, 221
University of California, Los Angeles. Geology-Geophysics Library, 239

Geophysics—Continued
University of Oklahoma. Geology Library, 256
The University of Texas. Geology Library, 264
University of Tulsa. Information Services Department, 266
Woods Hole Oceanographic Institution, 274
See also Atmospheric Physics, Geology, Geomagnetism, Meteorology, Seismology, *and* Volcanology

Geriatrics
Duke University. Regional Center for the Study of Aging, 64
Forest Park Foundation, 69
National Council on the Aging, 131
See also Progeria

Germanium
Midwest Research Institute. Germanium Information Center, 108

Germicides, *see* Microbiocides

Glaciology
American Geographical Society, 14
Arctic Institute of North America. Arctic Bibliography Project, 32
Indiana University. Geology Library, 84
Library of Congress. Science and Technology Division, 96
The National Academy of Sciences—National Research Council. World Data Center A, 126
Ohio State University. Institute of Polar Studies, 145
U.S. Department of the Interior. National Park Service, 223
U.S. Department of the Treasury. U.S. Coast Guard. Office of Operations, 227
The University of Texas. Geology Library, 264

Glass
American Ceramic Society, Inc., 8
American Scientific Glassblowers Society, 25
American Society for Testing and Materials, 26
Foote Mineral Co., 69
Glass Tempering Association, 75
Massachusetts Institute of Technology:
Materials Research Laboratory, 103
Science Library, 103
Owens-Corning Fiberglas Corp., 147
Owens-Illinois Glass Co. Technical Center and Research Library, 147
U.S. Department of Commerce. National Bureau of Standards. Inorganic Materials Division, 194

Gluten Products
Keever Starch Co., 93

Glycerines
American Oil Chemists' Society, 20
Colgate-Palmolive Co., 55

Gnotobiotics
Hazleton Laboratories, Inc., 79
University of Notre Dame. Lobund Laboratory, 255

Gold
American Bureau of Metal Statistics, 7
Engelhard Industries, Inc., 65

Gold—Continued
- U.S. Department of the Treasury. Bureau of the Mint, 226

Graphic Arts
- American Society of Industrial Designers, 28
- The Institute of Paper Chemistry, 87
- Minnesota Mining & Manufacturing Co. Graphic Products Library, 109
- Rochester Institute of Technology:
  - Graphic Arts Information Service, 159
  - Library, 160
- U.S. Department of the Treasury. Bureau of Engraving and Printing, 226

Graphite
- U.S. Department of Defense. Department of the Air Force. Air Force Materials Laboratory (MAAM), 203
- University of Dayton. Research Institute, 242

Ground Water, *see* Hydrology *and* Water Resources

Guidance and Control Systems
- American Astronautical Society, 7
- Avco Corp. Ordnance Division, 37
- Barnes Engineering Co., 38
- Booz, Allen Applied Research, Inc., 44
- Fluidyne Engineering Corp., 69
- Massachusetts Institute of Technology:
  - Aeronautics and Astronautics Library, 101
  - Instrumentation Laboratory, 102
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- Princeton University. Aeronautical Engineering Library, 153
- Republic Aviation Corp. Engineering Library, 158
- U.S. Department of Defense. Defense Documentation Center, 202
- *See also* Command and Control Systems *and* Systems Analysis and Design

Guided Missiles, *see* Missiles and Rockets

Gynecology
- American College of Surgeons, 9
- College of Physicians of Philadelphia, 55
- Columbia University. Medical Library, 57
- The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263

Hafnium
- Carborundum Co., 49
- National Lead Co. Titanium Alloy Manufacturing Division, 133

Hair
- Medical Chemicals Corp., 104

Harbors
- American Society of Civil Engineers, 28
- Princeton University. River and Harbor Library, 154
- U.S. Department of Commerce. Coast and Geodetic Survey. Office of Oceanography, 189

Hearing, *see* Audiology

Hearing Aids
- Alexander Graham Bell Association for the Deaf, Inc., 3
- American Speech & Hearing Association, 29
- U.S. Veterans Administration. Prosthetic and Sensory Aids Service, 234

Heart Disease, *see* Medicine

Heat, *see* High-Temperature Research *and* Thermodynamics

Heat Illness
- The National Academy of Sciences—National Research Council. Committee on Sanitary Engineering and Environment, 116

Heating
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Carrier Research & Development Co. Logan Lewis Library, 51
- Institute of Boiler & Radiator Manufacturers, 86
- Mueller Brass Co., 110
- National Mineral Wool Insulation Association, 133
- U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193

Heat Measurement
- Bethlehem Steel Co. Homer Research Laboratories, 42
- Owens-Illinois Glass Co. Technical Center and Research Library, 147
- Society for Nondestructive Testing, 168
- Tempil Corp., 177
- U.S. Department of Commerce. National Bureau of Standards. Heat Division, 194
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Albany Metallurgy Research Center, 208
  - Fish and Wildlife Service.
    - Bureau of Sport Fisheries and Wildlife:
      - Tiburon Marine Laboratory, 221
- University of California, San Diego. Scripps Institution of Oceanography, 240

Heat Transfer
- Air-Conditioning and Refrigeration Institute, 3
- Fluidyne Engineering Corp., 69
- Franklin Institute. Laboratories for Research and Development, 70
- Harvard University. Gordon McKay School of Engineering and Applied Physics, 77
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- Owens-Illinois Glass Co. Technical Center and Research Library, 147
- Purdue University. Jet Propulsion Center, 155
- United Aircraft Corp. Research Library, 179
- University of Colorado. Engineering Research Center, 241
- The University of Texas. Defense Research Laboratory, 264

Helicopters, *see* Aircraft

Helium
- U.S. Department of the Interior. Bureau of Mines. Helium Research Center, 210

- Hematology
  - American Heart Association, 15
  - The National Academy of Sciences—National Research Council:
    - Committee on Blood and Transfusion Problems, 114
    - Committee on Plasma and Plasma Substitutes, 115
    - Committee on Thrombosis and Hemorrhage, 117
  - U.S. Department of Defense. Department of the Air Force. Aerospace Medical Research Laboratories, 203
- Herbariums
  - American Association of Museums, 6
- Herbicides
  - Chemical Insecticide Corporation, 53
  - Connecticut Botanical Society, Inc., 58
  - Ohio State University. Ohio Cooperative Wildlife Research Unit, 146
- Herbs
  - Herb Society of America, 79
  - *See also* Medicinal Plants
- Heredity, *see* Genetics
- Herpetology
  - American Museum of Natural History, 19
  - Buffalo Museum of Science, 45
  - California Academy of Sciences, 46
  - Gulf Coast Research Laboratory, 75
  - New York Zoological Society, 139
  - Smithsonian Institution. U.S. National Museum. Museum of National History, 167
  - University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
  - University of Michigan. Museum of Zoology, 250
  - University of Nevada. Biology Museum and Research Laboratories, 252
- Hibernation
  - U.S. Department of Defense. Department of the Navy. Hibernation Information Exchange, 204
- Hides and Leather
  - American Society for Testing and Materials, 26
  - Harris Research Laboratories, Inc., 76
  - Nopco Chemical Co., 139
  - U.S. Department of Agriculture. Agricultural Research Service. Eastern Utilization and Development Division, 183
  - U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195
- High-energy Physics, *see* Physics
- High-purity Materials, *see* Materials *and* Properties
- High-purity Metals, *see* Metals *and* Properties
- High-temperature Research
  - American Ceramic Society, Inc., 8
  - Battelle Memorial Institute. Defense Metals Information Center, 39
  - Crucible Steel Co. of America, 60
  - International Nickel Co., Inc., 89
  - National Lead Co. Titanium Alloy Manufacturing Division, 133
  - Nuclear Metals, Inc., 140
- High-temperature Research—Continued
  - Stanford Research Institute, 172
  - Tempil Corp., 177
  - United Nuclear Corp., 180
  - U.S. Department of Commerce. National Bureau of Standards. Heat Division, 194
  - U.S. Department of the Interior.
    - Bureau of Mines:
      - College Park Metallurgy Research Center, 209
      - Rolla Metallurgy Research Center, 214
- High-voltage Engineering
  - High Voltage Engineering Corp., 80
  - Ion Physics Corp., 89
  - U.S. Department of the Interior. Bonneville Power Administration, 207
  - Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
- Highway Engineering
  - American Society of Civil Engineers, 28
  - Associated General Contractors of America, 33
  - Automotive Safety Foundation, 36
  - Institute of Traffic Engineers, 88
  - Massachusetts Institute of Technology. Joint Highway Research Project, 102
  - The National Academy of Sciences—National Research Council. Highway Research Board, 120
  - Purdue University. Joint Highway Research Project, 155
  - University of California. Institute of Transportation and Traffic Engineering, 237
- Histology
  - Carnegie Institution of Washington. Department of Embryology, 49
  - Columbia University:
    - Biological Sciences Library, 56
    - Medical Library, 57
  - Harvard University. Biology Laboratories, 76
  - Hazleton Laboratories, Inc., 79
  - Indiana University. Chemistry Library, 84
  - Pharmacology Research, Inc., 150
  - U.S. Department of the Interior. Fish and Wildlife Service. Bureau of Sport Fisheries and Wildlife. Eastern Fish Disease Laboratory, 219
  - The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263
- History of Agriculture
  - Agricultural History Society, 2
- History of Chemistry
  - Fisher Scientific Co., 68
  - University of California, Los Angeles. Chemistry Research Library, 239
  - University of Pennsylvania. Edgar Fahs Smith Memorial Collection, 258
- History of Dentistry
  - American Dental Association, 10
  - Indiana University. School of Dentistry Library, 84
  - University of North Carolina. Division of Health Affairs, 254
  - The University of Texas. Dental Branch Library, 264
  - S.S. White Dental Manufacturing Company, 274

History of Medicine
- American College of Surgeons, 9
- Cedars of Lebanon Hospital, 51
- Charitable, Educational and Scientific Foundation, 52
- College of Physicans of Philadelphia, 55
- Fisher Scientific Co., 68
- Medical & Chirurgical Faculty of the State of Maryland, 104
- Ohio State University. Main Library, 145
- Rhode Island Medical Society, 159
- St. Louis Medical Society, 162
- Stanford University. Lane Medical Library, 173
- U.S. Department of Health, Education, and Welfare. Public Health Service. National Library of Medicine, 206
- University of California, Los Angeles. Biomedical Library, 239
- University of Kentucky. Medical Center, 247
- University of Michigan. Medical Center Library, 249
- University of North Carolina. Division of Health Affairs, 254
- University of Pennsylvania. Wistar Institute Library, 260

History of Pharmaceutical Science
- American Institute of the History of Pharmacy, 17
- American Pharmaceutical Association, 22
- American Society of Hospital Pharmacists, 28
- Fisher Scientific Co., 68
- Rutgers—The State University. College of Pharmacy Library, 161
- University of North Carolina. Division of Health Affairs, 254

History of Science and Technology
- American Institute of Physics, 17
- American Iron & Steel Institute, 18
- American Philosophical Society, 23
- American Psychiatric Association, 24
- Automobile Manufacturers Association, 36
- Bureau of Railway Economics, 46
- Case Institute of Technology, 51
- Columbia University. Mathematics and History of Science Library, 57
- DoAll Co., 62
- Engineering Societies Library, 65
- Franklin Institute. Library, 71
- The Institute of Paper Chemistry, 87
- Miami University. Aeronautics Museum, 106
- Michigan Technological University. Library, 108
- New York Public Library, 138
- Noah Worcester Dermatological Society, Inc., 139
- Pacific Coast Entomological Society, 148
- Princeton University. Mathematics-Physics Library, 153
- Purdue University. University Libraries and Audio-Visual Center, 156
- Smithsonian Institution.
  - National Air Museum, 166
  - U.S. National Museum:
    - Museum of History and Technology, 167
- U.S. Department of Defense. Department of the Navy. U.S. Naval Observatory, 205
- University of California, Davis. University Library, 238
- University of Notre Dame. Biology Library, 255

Homeopathy
- American Institute of Homeopathy, 17

Hormones
- American Bio-Synthetics Corp., 7
- Medical Chemicals Corp., 104
- Purdue University. Trace Level Research Institute, 156
- University of Pennsylvania. George S. Cox Medical Research Institute, 258

Horticulture
- American Association of Nurserymen, Inc., 6
- American Horticultural Society, Inc., 16
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Department, 90
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Massachusetts Horticultural Society, 101
- National Canners Association, 130
- Norfolk Botanical Garden, 139
- Ohio Agricultural Experiment Station, 143
- Purdue University:
  - Agricultural Information Department, 154
  - University Libraries and Audio-Visual Center, 156
- Rutgers—The State University. New Jersey College of Agriculture Library, 161
- U.S. Department of Agriculture.
  - Agricultural Research Service:
    - Western Utilization Research and Development Division, 183
  - Cooperative State Research Service, 184
- University of California, Davis. University Library, 238
- University of California, Riverside. University Library, 240
- University of Florida. Agricultural Experiment Stations, 243
- University of Illinois. Illinois Agricultural Experiment Station, 246
- University of North Carolina. Agricultural Experiment Station, 253
- University of Pennsylvania. Morris Arboretum Library, 259
- University of Rhode Island. Agricultural Experiment Station, 262
- University of Wyoming. Agricultural Experiment Station, 268
- West Virginia University. West Virginia Agricultural Experiment Station, 274

Hospitals
- American Association of Hospital Consultants, 6
- American College of Surgeons, 9
- American Hospital Association, 16
- American Psychiatric Association, 24
- Kentucky State Health Department, 93
- Public Health Federation of the Cincinnati Area, 154
- U.S. Department of Health, Education, and Welfare. Public Health Service, 206
- U.S. Veterans Administration. Medical and General Reference Library, 229
- University of Pittsburgh. Graduate School of Public Health Library, 261

Human Engineering
  American Foundation for the Blind, Inc., 13
  Avco Corp. Technical Communications Department, 37
  Dunlap and Associates, Inc., 64
  Federal Aviation Agency:
    Aeronautical Center Library Service, 67
    Headquarters Library, 68
  Ford Motor Co. Technical Information Section, 69
  Library of Congress. Science and Technology Division, 96
  Republic Aviation Corp. Engineering Library, 158
  System Development Corp., 176

Huntington's Chorea
  Creedmoor Institute for Psychobiologic Studies, 60

Hydraulic Engineering
  Aircraft Technical Service, Inc., 3
  American Society of Civil Engineers, 28
  American Society of Lubrication Engineers, 28
  Barnes Engineering Co., 38
  Bell Helicopter Co., 42
  Colorado State University. University Libraries, 56
  Library of Congress. Science and Technology Division, 96
  Massachusetts Institute of Technology. Hydrodynamics Laboratory, 102
  National Fluid Power Association, 132
  Pneumodynamics Corp. Cleveland Pneumatic Division, 151
  Princeton University. River and Harbor Library, 154
  Southern California Meter Association, 170
  Tennessee Valley Authority. Technical Library, 177
  U.S. Department of Agriculture. Soil Conservation Service, 187
  U.S. Department of Commerce. National Bureau of Standards. Mechanics Division, 195
  U.S. Department of the Interior:
    Bureau of Reclamation, 215
    Geological Survey, 221

Hydraulic Mining
  U.S. Department of the Interior.
    Bureau of Mines:
      Anthracite Research Center, 209
      Pittsburgh Mining, Coal, and Explosives Research Center, 214
      Reno Metallurgy Research Center, 214

Hydrobiology, *see* Aquatic Sciences

Hydrocarbons
  American Society for Testing and Materials, 26
  Celanese Corporation of America. Celanese Chemical Co., 52
  Texas A & M University. Chemical Thermodynamic Properties Center, 177

Hydrodynamics, *see* Fluid Mechanics

Hydrographic Charts
  American Geographical Society, 14
  Miami University. Geology Museum and Map Library, 106
  U.S. Department of Commerce. Coast and Geodetic Survey, 188

Hydrography, *see* Oceanography

Hydrology
  American Meteorological Society, 19
  Arctic Institute of North America. Arctic Bibliography Project, 32
  Delaware Geological Survey, 61
  Institute for Fisheries Research, 85
  Isotopes, Inc., 91
  Massachusetts Institute of Technology. Hydrodynamics Laboratory, 102
  Tennessee Valley Authority. Technical Library, 177
  U.S. Department of Agriculture. Soil Conservation Service, 187
  U.S. Department of Commerce. Weather Bureau, 201
  U.S. Department of the Interior:
    Bureau of Reclamation, 215
    Geological Survey, 221
    National Park Service, 223
  University of Nevada. Desert Research Institute, 252
  University of Oklahoma. Bureau of Water Resources Research, 255
  Water Information Center, Inc., 270

Hydromechanics, *see* Fluid Mechanics

Hypothermia
  U.S. Department of Defense. Department of the Navy. Hibernational Information Exchange, 204

Ichthyology
  American Fisheries Society, 12
  American Museum of Natural History, 19
  California Academy of Sciences, 46
  Gulf Coast Research Laboratory, 75
  Institute for Fisheries Research, 85
  International Oceanographic Foundation, 89
  Michigan State University. Agricultural Experiment Station, 107
  New York Zoological Society, 139
  Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
  U.S. Department of the Inerior. Fish and Wildlife Service, 216
  University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
  University of California, San Diego. Scripps Institution of Oceanography, 240
  University of Michigan:
    Science and Engineering Libraries, 250
    Museum of Zoology, 250
  University of Nevada. Biology Museum and Research Laboratories, 252
  West Virginia University. West Virginia Agricultural Experiment Station, 274
  See also Fisheries and Fish Toxicants

Illumination
  Edison Electric Institute, 65
  Engineering Societies Library, 65

Illumination—Continued
- Illuminating Engineering Research Institute, 82
- Illuminating Engineering Society, 83
- National Electrical Manufacturers Association, 132
- Ohio State University:
  - Electrical Engineering Library, 144
  - Institute for Research in Vision, 145
- U.S. Department of the Interior. Bureau of Mines. Office of the Assistant Director, Health and Safety, 211

Industrial Design
- American Society of Industrial Designers, 28
- Booz, Allen Applied Research, Inc., 44

Industrial Engineering
- American Gear Manufacturers Association, 14
- American Society for Quality Control, Inc., 26
- Arthur D. Little, Inc., 33
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Booz, Allen Applied Research, Inc., 44
- Burroughs Corp. Defense and Space Group, 46
- Columbia University. Engineering Library, 56
- Eaton Manufacturing Co. Research Center, 65
- Engineering Societies Library, 65
- Franklin Institute. Laboratories for Research and Development, 70
- Georgia Institute of Technology. Price Gilbert Memorial Library, 74
- High Voltage Engineering Corp., 80
- Industrial Research Institute, Inc., 84
- Oak Ridge Gaseous Diffusion Plant, 141
- Ohio State University. Davis Welding Library, 144
- Purdue University:
  - Engineering Experiment Station, 155
  - University Libraries and Audio-Visual Center, 156
- University of Dayton. University Library, 243
- University of Michigan. Science and Engineering Libraries, 250
- West Virginia University:
  - Agriculture-Engineering Library, 273
  - Engineering Experiment Station, 273

Industrial Hygiene
- American Industrial Hygiene Association, 16
- American Iron & Steel Institute, 18
- Atomic Industrial Forum, Inc., 35
- Carus Chemical Co. Permanganate Information Service, 51
- Mellon Institute, 105
- The National Academy of Sciences—National Research Council. Committee on Sanitary Engineering and Environment, 116
- U.S. Department of the Interior. Bureau of Mines. Office of the Assistant Director, Health and Safety, 211
- University of Michigan. Public Health Library, 250
- University of Pittsburgh. Graduate School of Public Health Library, 261
- University of Washington. Environmental Health Division, 267
- *See also* Occupational Medicine

Information Storage and Retrieval
- American Documentation Institute, 11
- American University. Center for Technology and Administration, 30
- Aries Corp., 33
- Battelle Memorial Institute. Information Research Center, 40
- Cambridge Communications Corp., 48
- General Services Administration. National Archives and Records Service, 73
- Georgia Institute of Technology. Rich Electronic Computer Center, 74
- Information for Industry, Inc., 85
- The National Academy of Sciences—National Research Council. Office of Documentation, 123
- National Biomedical Research Foundation, 130
- National Science Foundation. Office of Science Information Service, 135
- Purdue University. Computer Science Center, 155
- Science Communication, Inc., 163
- System Development Corp., 176
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Instrumentation Information Center, 194
    - Research Information Center and Advisory Service of Information Processing, 198
  - Patent Office:
    - Office of Research and Development, 200
- Western Reserve University. Center for Documentation, 271
- *See also* Data Processing, Documentation, *and* Computer Science

Infrared
- Aerojet-General Corp. Corporate Technical Information Center, 1
- American Society for Testing and Materials, 26
- Avco Corp. Ordnance Division, 37
- Barnes Engineering Co., 38
- Ohio State University. Cole Memorial Library of Physics, 144
- Philips Laboratories, 150
- Sadtler Research Laboratories, 162
- U.S. Department of the Treasury. Bureau of Customs, 225
- University of Michigan. Infrared Information and Analysis Center, 249

Inks, *see* Printing Inks

Inorganic Chemistry
- Allied Chemical Corp. Center Research Laboratory, 4
- American Chemical Society, 8
- American Cyanamid Co., 10
- American Society for Metals, 25
- Armco Steel Corp. Research Center, 33
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Carborundum Co., 49
- Colgate-Palmolive Co., 55
- Columbia University. Chemistry Library, 56
- Ethyl Corp. Chemical Research and Development Library, 66
- Foote Mineral Co., 69

Inorganic Chemistry—Continued
- General Aniline & Film Corp.:
  - Central Research Laboratory, 72
  - Research and Development Laboratory, 72
- Illinois Institute of Technology. IIT Research Institute, 81
- Indiana University. Chemistry Library, 84
- The Institute of Paper Chemistry, 87
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- Pennsalt Chemicals Corp., 149
- Philips Laboratories, 150
- Princeton University. Chemistry Library, 153
- Purdue University. Literature Retrieval System for Inorganic Compounds, 155
- Southern Research Institute, 171
- Stanford University. Swain Library of Chemistry, 173
- TRW Space Technology Laboratories, 179
- Universal Oil Products Co. Research Library, 235
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Florida. Chemistry Library, 244
- Wyandotte Chemical Corp. Research Library and Technical Information Center, 275

Insect Control, *see* Pest Control

Insect Diseases, *see* Animal Pathology

Insecticides
- Chemical Insecticide Corp., 53
- Foster D. Snell, Inc., 70
- National Canners Association, 130
- Ohio State University. Ohio Cooperative Wildlife Research Unit, 146
- U.S. Department of Agriculture. National Agricultural Library, 185
- U.S. Department of the Interior.
  - Fish and Wildlife Service.
    - Bureau of Sport Fisheries and Wildlife:
      - Denver Wildlife Research Center, 218
      - Sandy Hook Marine Laboratory, 220

Instrumentation
- Allegheny Ludlum Steel Corp. Research Center Library, 4
- American Cyanamid Co., 10
- American Institute of Physics, 17
- American Ordnance Association, 21
- Applied Research Laboratories, Inc., 32
- Armco Steel Corp. Research Center, 33
- Avco Corp. Technical Communications Department, 37
- Barnes Engineering Co., 38
- Beckman Instruments, Inc., 41
- Bell & Howell Co., 42
- Bolt, Beranek, & Newman, Inc., 44
- Booz, Allen Applied Research, Inc., 44
- Brookhaven National Laboratory, 45
- Carl A. Bays & Associates, Inc., 49
- Engineering Societies Library, 65
- Fisher Scientific Co., 68
- Franklin Institute. Laboratories for Research and Development, 70
- Institute of Textile Technology, 88
- Instrument Society of America, 88

Instrumentation—Continued
- Magnavox Co., 99
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- The National Academy of Sciences—National Research Council. Committee on Fire Research, 114
- New York Academy of Sciences, 137
- New York Microscopical Society, 138
- Oak Ridge Gaseous Diffusion Plant, 141
- Princeton University. Aeronautical Engineering Library, 153
- Scientific Apparatus Makers Association, 163
- Southern California Meter Association, 170
- Southern Methodist University. Acoustics Laboratory, 171
- Stein Engineering Services, Inc., 174
- Texas Instruments, Inc. Corporate Technical Information Center, 178
- U.S. Atomic Energy Commission. Radiological Physics and Instrumentation Branch, 181
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Instrumentation Information Center, 94
  - Weather Bureau, 201
- U.S. Department of the Interior. Bureau of Mines. Office of the Assistant Director, Health and Safety, 211
- U.S. Department of the Treasury. Bureau of Customs, 225
- Universal Oil Products Co. Research Library, 235
- University of Pennsylvania. Moore School of Electrical Engineering Library, 259
- The University of Texas. Military Physics Research Laboratory, 265
- Westinghouse Electric Corp. Engineering Library, 272
- Winzen Research, Inc. 274
- Woods Hole Oceanographic Institution, 274
- *See also* Measuring Devices

Insulation
- American Society for Testing and Materials, 26
- Hughes Aircraft Co. Electronic Properties Information Center, 80
- Midwest Research Institute. Thermophysical Properties of Thermal Insulating Materials, 109
- The National Academy of Sciences—National Research Council. Conference on Electrical Insulation, 118
- National Electrical Manufacturers Association, 132
- National Mineral Wood Insulation Association, 133
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Ionosphere
- American Meteorological Society, 19
- The National Academy of Sciences—National Research Council. U.S. National Committee for International Years of the Quiet Sun, 125
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Boulder Laboratories Library, 193
    - Ionosphere Research and Propagation Division, 195
    - Upper Atmosphere and Space Physics Division, 198

Iridium, *see* Platinum Metals

Irrigation
- American Society of Civil Engineers, 28
- Colorado State University. University Libraries, 56
- U.S. Department of Agriculture. Soil Conservation Service, 187
- U.S. Department of the Interior. Bureau of Reclamation, 215
- U.S. National Committee of the International Commission on Irrigation and Drainage, 228
- University of California, Davis. University Library, 238
- University of California, Berkeley. Water Resources Center Archives, 238
- Water Information Center, Inc., 270
- *See also* Drainage

Laboratory Animals
- Animal Care Panel, Inc., 31
- Hazleton Laboratories, Inc., 79
- The National Academy of Sciences—National Research Council. Institute of Laboratory Animal Resources, 120
- National Society for Medical Research, 136
- Pharmacology Research, Inc., 150

Lacquers, *see* Paints and Lacquers

Landscaping
- American Association of Nurserymen, Inc., 6
- American Institute of Architects, 16
- Massachusetts Horticultural Society, 101
- Ohio State University. Brown Hall Library, 144
- University of Illinois. City Planning and Landscape Architecture Library, 245

Lasers
- Melpar, Inc. Technical Information Center, 105
- Oak Ridge National Laboratory. Research Materials Information Center, 142
- Ohio State University. Antenna Laboratory Library, 143
- U.S. Department of Commerce. National Bureau of Standards. Metrology Division, 195
- University of Colorado. Engineering Research Center, 241
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Latex, *see* Rubber

Laundering, *see* Cleaning Compounds

Lead
- American Bureau of Metal Statistics, 7
- U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209
- U.S. Department of the Treasury. Bureau of the Mint, 226

Leather, *see* Hides and Leather

Lichens
- Harvard University. Farlow Reference Library, 77
- Miami University. Herbarium, 106
- Ohio State University. Institute of Polar Studies, 145
- University of Colorado. Museum, 242

Life Support Systems, *see* Space Biology and Medicine

Lighting, *see* Illumination

Lignite
- U.S. Department of the Interior. Bureau of Mines. Grand Forks Lignite Research Laboratory, 210

Limnology, *see* Aquatic Sciences

Liquid Fuels, *see* Fuels

Liquid Propellants, *see* Propellants and Propulsion

Lithium
- Foote Mineral Company, 69

Logistics
- American Ordnance Association, 21
- George Washington University. Logistics Research Project, 74
- System Development Corp., 176

Low-Temperature Research, *see* Cryogenics

Lubricants and Lubrication
- American Gear Manufacturers Association, 14
- American Petroleum Institute, 22
- American Society for Testing & Materials, 26
- American Society of Lubrication Engineers, 28
- Battenfeld Grease & Oil Corp., 41
- Cheminform Institute, 53
- Foster D. Snell, Inc., 70
- Marlin-Rockwell Corp., 100
- U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227
- University of Dayton. Research Institute, 242
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Lumber, *see* Forestry

Machine Translation
- American Documentation Institute, 11
- Massachusetts Institue of Technology. Computation Center, 101
- The National Academy of Sciences—National Research Council. Office of Documentation, 123
- National Science Foundation. Office of Science Information Service, 135
- U.S. Department of Commerce. National Bureau of Standards. Research Information Center and Advisory Service on Information Processing, 198

Machining
- American Society of Tool & Manufacturing Engineers, 29
- DoAll Co., 62
- Metcut Research Machining Information Center, 105
- Pneumodynamics Corp. Cleveland Pneumatic Division, 151

Magnesium
- Battelle Memorial Institute. Defense Metals Information Center, 39

Magnetic Materials
- Crucible Steel Company of America, 60
- Franklin Institute. Laboratories for Research and Development, 70
- Metal Powder Industries Federation—American Powder Metallurgy Institute, 105
- Philips Laboratories, 150

Magnetism
- Bell & Howell Co., 42
- Cambridge Communications Corp., 48
- Columbia University. Physics Library, 57
- Philips Laboratories, 150
- U.S. Department of Commerce. National Bureau of Standards. Electricity Division, 193
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
- West Virginia University. Mathematics—Physics Research Library, 273

Magnetohydrodynamics
- Avco Corp. Avco-Everett Research Laboratory, 36
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Massachusetts Institute of Technology. Fluid Mechanics Laboratory, 102
- Princeton University. Plasma Physics Laboratory Library, 153
- University of Pennsylvania. Power Information Center, 259

Malacology
- American Museum of Natural History, 19
- Harvard University. Museum of Comparative Zoology, 78
- Miami University. Zoology Museum, 107
- Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
- University of Michigan. Museum of Zoology, 250

Mammalogy
- American Museum of Natural History, 19
- California Academy of Sciences, 46
- Miami University. Zoology Museum, 107
- New York Zoological Society, 139
- Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
- U.S. Department of the Interior. Fish and Wildlife Service. Bird and Mammal Laboratories, 218
- University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
- University of Michigan. Museum of Zoology, 250

Manganates
- Carus Chemical Co. Permanganate Information Service, 51

Mapping, *see* Cartography

Maps
- Academy of Natural Sciences of Philadelphia, 1
- American Geographical Society, 14
- Bernice P. Bishop Museum, 42
- Columbia University. Geology Library and University Map Room, 57
- Illinois State Geological Survey, 82
- Library of Congress. Map Division, 95
- Miami University:
  - Army Map Service Depository, 106
  - Geology Museum and Map Library, 106
- Purdue University. University Libraries and Audio-Visual Center, 156
- U.S. Department of Commerce. Coast and Geodetic Survey, 188
- U.S. Department of the Interior. Geological Survey, 221

Maps—Continued
- University of Arizona. Library, 236
- University of California, Los Angeles. Map Library, 239
- University of Illinois. Map and Geography Library, 246
- University of Maine. Raymond H. Fogler Library, 248
- University of Puerto Rico. General Library, 261
- The University of Texas. Geology Library, 264
- University of Toledo. Library, 265
- *See also* Aeronautical Charts, Geological Maps, Hydrographic Charts, Oceanographic Maps and Charts, *and* Weather Maps

Marine Biology, *see* Aquatic Sciences

Marine Engineering
- Allen Weather Corp., 4
- American Welding Society, 30
- The Boeing Co. Aero-Space Division, 43
- Engineering Societies Library, 65
- Franklin Institute. Library, 71
- Massachusetts Institute of Technology. Engineering Library, 102
- The National Academy of Sciences—National Research Council:
  - Maritime Cargo Transportation Conference, 121
  - Ship Hull Research Committee, 124
- U.S. Department of Commerce. Maritime Administration, 191
- U.S. Department of Defense. Defense Documentation Center, 202
- U.S. Department of the Treasury.
  - U.S. Coast Guard:
    - Office of Engineering, 227
    - Ship Structure Committee, 228

Masers
- Oak Ridge National Laboratory. Research Materials Information Center, 142
- University of Colorado. Engineering Research Center, 241
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Mass Spectroscopy, *see* Spectroscopy

Materials
- Aerojet-General Corp. Aerojet-General Nucleonics, 1
- Allied Research Associates, Inc., 4
- American Nuclear Society, 20
- American Ordnance Association, 21
- American Society for Testing and Materials, 26
- Avco Corp. Technical Communications Department, 37
- Belfour Engineering Co. Mechanical Properties Data Center, 41
- Cambridge Communications Corp., 48
- Carborundum Co., 49
- Carrier Research & Development Co. Logan Lewis Library, 51
- Engineering Societies Library, 65
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- Hughes Aircraft Co. Electronic Properties Information Center, 80
- Industrial Tectonics, Inc. Bearing Division, 85
- Iowa State University of Science and Technology. Institute for Atomic Research, 90

Materials—Continued
- Johns Hopkins University. Chemical Propulsion Information Agency, 92
- Massachusetts Institute of Technology:
  - Department of Civil Engineering, 101
  - Engineering Library, 102
  - Materials Research Laboratory, 103
- Melpar, Inc. Technical Information Center, 105
- Midwest Research Institute. Thermophysical Properties of Thermal Insulating Materials, 109
- The National Academy of Sciences—National Research Council:
  - Materials Advisory Board, 121
  - Prevention of Deterioration Center, 124
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- National Association of Corrosion Engineers, 129
- New Mexico Highlands University. Institute of Scientific Research, 137
- Nuclear Metals, Inc., 140
- Oak Ridge Gaseous Diffusion Plant, 141
- Oak Ridge National Laboratory. Research Materials Information Center, 142
- Purdue University. Thermophysical Properties Research Center, 155
- Republic Aviation Corp. Engineering Library, 158
- Smithsonian Institution. Science Information Exchange, 166
- Society for Nondestructive Testing, 168
- Stanford Research Institute, 172
- Stein Engineering Services, Inc., 174
- Tempil Corp., 177
- Troxler Electronic Laboratories, Inc., 179
- United Aircraft Corp. Research Library, 179
- United Nuclear Corp., 180
- U.S. Atomic Energy Commission. Division of Technical Information Extension, 180
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Analytical Chemistry Division, 192
    - Inorganic Materials Division, 194
    - Mechanics Division, 195
    - Office of Standard Reference Materials, 196
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - Air Force Materials Laboratory (MAAM), 203
    - Office of Aerospace Research, 203
- U.S. Department of the Interior. Bureau of Mines. Norris Metallurgy Research Laboratory, 211
- University of Colorado. Engineering Research Center, 241
- University of Dayton. Research Institute, 242
- University of Nevada. Desert Research Institute, 252
- University of Pennsylvania. Towne Scientific Library, 260
- The University of Texas. Structural Mechanics Engineering Research Laboratory, 265
- Westinghouse Electric Corp. Engineering Library, 272
- *See also* Accoustical Materials, Bituminous Materials, Building Materials, Dental Materials, Fluorescent Materials, Magnetic Materials, *and* Structural Materials

Material Properties, *see* Properties

Material Testing, *see* Testing

Mathematics
- Aerojet-General Corp.:
  - Aerojet-General Nucleonics, 1
  - Technical Library, 1, 2
- Allied Research Associates, Inc., 4
- American Institute of Physics, 17
- American Mathematical Society, 18
- Arthur D. Little, Inc., 33
- Atlantic Refining Co. Research and Development Department. (Southwest Division), 35
- Auburn University. Library, 36
- Avco Corp. Electronics Division, 37
- Beckman Instruments, Inc., 41
- The Boeing Co. Boeing Scientific Research Laboratories, 44
- Booz, Allen Applied Research, Inc., 44
- Brookhaven National Laboratory, 45
- Brooklyn College Library, 45
- Burroughs Corp. Defense and Space Group, 46
- California Institute of Technology. Libraries, 47
- Carrier Research & Development Co. Logan Lewis Library, 51
- Case Institute of Technology, 51
- Chemical Rubber Publishing Co., 53
- Columbia University. Mathematics and History of Science Library, 57
- Cranbrook Institute of Science, 59
- Duke University. Mathematics-Physics Library, 64
- Duodecimal Society of America, Inc., 64
- Dynatronics, Inc., 65
- Ford Motor Co. Technical Information Section, 69
- Franklin Institute. Library, 71
- George Washington University. Logistics Research Project, 74
- Georgia Institute of Technology. Rich Electronic Computer Center, 74
- Harvard University. George David Birkoff Mathematical Library, 77
- Humble Oil & Refining Co. Houston Research Library, 81
- Indiana University. Astronomy-Physics-Mathematics Library, 83
- Massachusetts Institute of Technology. Science Library, 103
- Michigan Technological University. Library, 108
- Minnesota Mining & Manufacturing Co. 3M Technical Library, 109
- National Center for Atmospheric Research. NCAR Library, 130
- National Reactor Testing Station. Technical Library, 134
- New York Academy of Sciences, 137
- New York Public Library, 138
- Oak Ridge Gaseous Diffusion Plant, 141
- Oak Ridge Institute of Nuclear Studies, 141
- Oak Ridge National Laboratory. Oak Ridge National Laboratory Library, 142
- Ohio State University:
  - Cole Memorial Library of Physics, 144
  - Electrical Engineering Library, 144
  - Mathematics Library, 145

Mathematics—Continued
- Princeton University:
  - Aeronautical Engineering Library, 153
  - Engineering Library, 153
  - Mathematics-Physics Library, 153
- Purdue University:
  - Computer Sciences Center, 155
  - University Libraries and Audio-Visual Center, 156
- Raytheon Co.:
  - Bedford Complex Library, 157
  - Communications and Data Processing Library, 157
  - Lowell Library, 157
  - Missile Systems Division Library, 157
  - Research Division Library, 157
  - Santa Barbara Operations Library, 157
- Republic Aviation Corp. Engineering Library, 158
- Rutgers—The State University:
  - Central Library, 161
  - College of South Jersey Library, 161
- Smithsonian Institution. Science Information Exchange, 166
- Southern Methodist University. Science Library, 171
- Stanford University. Physics-Mathematics-Statistics Library, 173
- Sun Oil Co. Research and Development Library, 176
- System Development Corp., 176
- Tennessee Valley Authority. Technical Library, 177
- United Nuclear Corp., 180
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Applied Mathematics Division, 192
    - NBS Library, 195
- U.S. Department of Defense.
  - Department of the Air Force:
    - Office of Aerospace Research, 203
  - Department of the Navy:
    - U.S. Naval Observatory, 205
- University of Arizona. Library, 236
- University of California, Berkeley. General Library, 238
- University of California, Los Angeles:
  - Engineering and Mathematical Sciences Library, 239
  - Numerical Analysis Research Library, 240
  - Physics Library, 240
- University of Dayton. University Library, 243
- University of Illinois:
  - Mathematics Library, 246
  - UICSM Mathematics Project, 247
- University of Kentucky. University Libraries, 248
- University of Michigan. Science and Engineering Libraries, 250
- University of North Carolina. Mathematics-Physics Library, 254
- University of Notre Dame. Mathematics and Computing Science Library, 255
- University of Oklahoma:
  - Computation Center, 256
  - Mathematics Library, 256
  - Science Library, 257
- University of Pennsylvania. Mathematics-Physics Library, 259
- University of Puerto Rico. General Library, 261
- University of Southern Mississippi. Library, 263

Mathematics—Continued
- The University of Texas. Military Physics Research Laboratory, 265
- University of Washington. University Library, 268
- West Virginia University. Mathematics-Physics Research Library, 273
- Westinghouse Electric Corp. Westinghouse Atomic Power Division, 272

Measuring Devices
- Barnes Engineering Co., 38
- DoAll Co., 62
- Fluidyne Engineering Corp., 69
- Instrument Society of America, 88
- New York University. Project SETE, 138
- Stein Engineering Services, Inc., 174
- Troxler Electronic Laboratories, Inc., 179
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Electricity Division, 193
    - Heat Division, 194
- U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227
- University of Colorado. Engineering Research Center, 241

Mechanical Engineering
- Aircraft Technical Service, Inc., 3
- American Society for Metals, 25
- Arthur D. Little, Inc., 33
- Avco Corp. Electronics Division, 37
- Battelle Memorial Institute. Library, 40
- Bethlehem Steel Co. Schwab Memorial Library, 43
- Booz, Allen Applied Research, Inc., 44
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Carrier Research & Development Co. Logan Lewis Library, 51
- Case Institute of Technology, 51
- Columbia University. Engineering Library, 56
- Duke University. College of Engineering Library, 63
- Dynatronics, Inc., 65
- Engineering Societies Library, 65
- Ford Motor Co. Technical Information Section, 69
- Franklin Institute. Laboratories for Research and Development, 70
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- Humble Oil & Refining Co. Houston Research Library, 81
- Marlin Rockwell Corp., 100
- Massachusetts Institute of Technology. Engineering Library, 102
- Ohio State University. Electrical Engineering Library, 144
- Princeton University. Engineeirng Library, 153
- Purdue University:
  - Engineering Experiment Station, 155
  - University Libraries and Audio-Visual Center, 156
- Republic Aviation Corp. Engineering Library, 158
- A. O. Smith Corp., 164
- Southern Research Institute, 171
- Stow Manufacturing Co., 174
- P. A. Sturtevant Co., 175
- Tennessee Valley Authority. Technical Library, 177

Mechanical Engineering—Continued
  U.S. Department of Defense.
    Defense Documentation Center, 202
    Department of the Air Force:
      Office of Aerospace Research, 203
  University of California, Los Angeles. Engineering and Mathematical Sciences Library, 239
  University of Dayton. University Library, 243
  University of Houston. Libraries, 245
  University of Illinois. Engineering Library, 245
  University of Maine. Technology Experiment Station, 248
  University of Michigan. Science and Engineering Libraries, 250
  University of New Hampshire. Engineering Experiment Station, 253
  University of Notre Dame. Engineering Library, 255
  University of Pennsylvania. Towne Scientific Library, 260
  The University of Texas. Engineering Library, 264
  University of Tulsa. Sidney Born Technical Library, 266
  West Virginia University:
    Agriculture-Engineering Library, 273
    Engineering Experiment Station, 273
  See also Stress Analysis

Mechanical Properties, *see* Properties

Medical Electronics, *see* Bioengineering

Medical Illustration
  College of Physicians of Philadelphia, 55
  U.S. Veterans Administration:
    Medical Illustration Service, 234
    Medical Illustration Staff, 234

Medicinal Plants
  Herb Society of America, 79
  University of Washington. Drug Plant Garden and Laboratories, 267

Medicine
  American College of Surgeons, 9
  American Heart Association, 15
  American Institute of Homeopathy, 17
  American Psychiatric Association, 24
  The Boeing Co. Airplane Division—Wichita Branch, 44
  Brookhaven National Laboratory, 45
  California College of Medicine, 46
  Charitable, Educational, & Scientific Foundation, Inc., 52
  College of Physicians of Philadelphia, 55
  Columbia University. Medical Library, 57
  Delaware Academy of Medicine, 60
  Denver Medical Society, 61
  Dow Corning Center for Aid to Medical Research, 63
  Duke University. Duke Medical Center, 63
  Georgia Institute of Technology. Technical Information Section, 74
  Hawaii Medical Library, 79
  Indiana University. School of Medicine Library, 84
  The John Crerar Library, 92
  Lilly Research Laboratories, 97
  Louisiana State University. School of Medicine, 99
  Massachusetts Institute of Technology. Neurosciences Research Information Center, 103

Medicine—Continued
  Mead Johnson & Co., 104
  Medical & Chirurgical Faculty of the State of Maryland, 104
  Melpar, Inc. Technical Information Center, 105
  Midwest Inter-Library Center, 108
  Miles Laboratories, Inc., 109
  Mississippi State Medical Association, 110
  The National Academy of Sciences—National Research Council:
    Advisory Committee on Atomic Bomb Casualty Commission, 112
    Advisory Committee to the Radiation Registry of Physicians, 112
    Committee on Hyperbaric Oxygenation, 115
    Committee on Shock, 117
    Committee on Tissue Transplantation, 117
    Committee on Thrombosis and Hemorrhage, 117
    Committee on Trauma, 118
    Follow-up Agency, 118
    Medical Records Section, 122
    NAS–NRC Library, 122
  National Society for Medical Research, 136
  New York Academy of Medicine, 137
  New York Academy of Sciences, 137
  New York University. New York University Libraries, 138
  Oak Ridge Institute of Nuclear Studies, 141
  Ohio State University. Health Center Library of Medicine, 144
  Pennsylvania Medical Society, 149
  Rhode Island Medical Society, 159
  Rutgers—The State University:
    Center of Alcohol Studies, 160
    College of Pharmacy Library, 161
    Institute of Microbiology, 161
  St. Louis Medical Society, 162
  Schering Corp., 163
  Smithsonian Institution. Science Information Exchange, 166
  Stanford Research Institute, 172
  Stanford University. Lane Medical Library, 173
  State Medical Society of Wisconin, 174
  Straub Clinic, 175
  Texas Medical Center Library, 178
  U.S. Department of Defense.
    Defense Documentation Center, 202
    Department of the Air Force:
      Aerospace Medical Research Laboratories, 203
      Office of Aerospace Research, 203
  U.S. Department of Health, Education and Welfare. Public Health Service, 206
  U.S. Veterans Administration, 229
  University of California, Los Angeles. Biomedical Library, 239
  University of Colorado:
    Libraries, 242
    Medical Center, 242
  University of Florida:
    Bureau of Professional Relations, 244
    J. Hillis Miller Health Center Library, 244

Medicine—Continued
  University of Kentucky:
    Medical Center, 247
    University Libraries, 248
  University of Michigan. Medical Center Library, 249
  University of North Carolina. Division of Health Affairs, 254
  University of Oklahoma. Medical Center Library, 257
  University of Pennsylvania:
    Allied Medical Professions Library, 257
    George S. Cox Medical Research Institute, 258
    Medical School Library, 259
    University Hospital Library, 260
  University of Pittsburgh. Graduate School of Public Health Library, 261
  The University of Texas:
    M. D. Anderson Hospital and Tumor Institute, 263
    Southwestern Medical School Library, 265
  University of Vermont. Bailey Memorial Library, 266
  University of Washington. University Library, 268
  The Upjohn Co., 269
  Warner-Lambert Pharmaceutical Co. Warner-Lambert Research Institute, 270
  Western Reserve University. Freiberger Library, 272
  See also Allergy, Anesthesiology, Aphasia, Bioengineering, Blindness, Cancer, Chiropractic, Deafness, Dermatology, Electrophysiology, Epidemiology, Geriatrics, Gynecology, Hematology, History of Medicine, Homeopathy, Hospitals, Huntington's Chorea, Neurology, Nursing, Occupational Medicine, Oncology, Ophthalmology, Osteopathy, Otolaryngology, Physical Therapy, Podiatry, Progeria, Psychobiology, Public Health, Radiology, Speech Disorders and Therapy, Surgery, *and* Tropical Medicine

Mental Health
  American Association on Mental Deficiency, 7
  American Mental Health Foundation, Inc., 18
  American Psychiatric Association, 24
  U.S. Department of Health, Education and Welfare. Public Health Service, 206
  See also Psychiatry

Metabolism
  Purdue University. Trace Level Research Institute, 156
  Smithsonian Institution. Astrophysical Observatory. Division of Radiation and Organisms, 165
  U.S. Department of Health, Education, and Welfare. Public Health Service, 206
  University of Pennsylvania. George S. Cox Medical Research Institute, 258

Metal Joining
  Allegheny Ludlum Steel Corp. Research Center Library, 4
  Manlabs, Inc., 100
  Reynolds Metals Co. Technical Information Center, 159
  P. A. Sturtevant Co., 175
  See also Welding

Metallurgy
  Aerojet-General Corp. Technical Library, 1, 2
  Allegheny Ludlum Steel Corp. Research Center Library, 4
  American Iron & Steel Institute, 18
  American Society for Metals, 25

Metallurgy—Continued
  American Zinc Institute, Inc., 30
  Armco Steel Corp. Research Center, 33
  Arthur D. Little, Inc., 33
  Avco Corp. Lycoming Division, 37
  Battelle Memorial Institute. Library, 40
  Bethlehem Steel Co., 42
  The Boeing Co. Aero-Space Division, 43
  Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
  Carnegie Library of Pittsburgh, 50
  Case Institute of Technology, 51
  Columbia University. Engineering Library, 56
  DoAll Co., 62
  Eaton Manufacturing Co. Research Center, 65
  Engineering Societies Library, 65
  Ford Motor Co. Technical Information Section, 69
  Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
  Institute for Scientific Information, 86
  Iowa State University of Science and Technology. Institute for Atomic Research, 90
  Manlabs, Inc., 100
  Marlin-Rockwell Corp., 100
  Massachusetts Institute of Technology:
    Engineering Library, 102
    Science Library, 103
  Mellon Institute, 105
  Michigan Technological University:
    Institute of Mineral Research, 107
    Library, 108
  Mueller Brass Co., 110
  The National Academy of Sciences—National Research Council. Materials Advisory Board, 121
  National Lead Co. Research Laboratories, 133
  National Reactor Testing Station. Technical Library, 134
  New York Public Library, 138
  Oak Ridge Gaseous Diffusion Plant, 141
  Oak Ridge National Laboratory. Oak Ridge National Laboratory Library, 142
  Ohio State University. Lord Hall Library, 145
  Owens-Illinois Glass Co. Technical Center and Research Library, 147
  Pennsalt Chemicals Corp., 149
  Purdue University:
    Engineering Experiment Station, 155
    University Libraries and Audio-Visual Center, 156
  Raytheon Co. Lowell Library, 157
  Republic Aviation Corp. Engineering Library, 158
  Republic Steel Corp. Research Center Library, 159
  Reynolds Metals Co. Technical Information Center, 159
  A. O. Smith Corp., 164
  Southern Research Institute, 171
  Stanford University. Branner Geological Library, 172
  U.S. Department of Commerce.
    National Bureau of Standards:
      Metallurgy Division, 195
      NBS Library, 195
  U.S. Department of Defense. Defense Documentation Center, 202
  University of Arizona. Arizona Bureau of Mines, 235
  University of Florida. Florida Engineering and Industrial Experiment Station, 244

Metallurgy—Continued
- University of Illinois. Engineering Library, 245
- University of Nevada. Mackay School of Mines, 252
- University of Notre Dame. Engineering Library, 255
- University of Pennsylvania. Towne Scientific Library, 260
- University of Rhode Island. Division of Engineering Research and Development, 262
- *See also* Beneficiation, Casting, Corrosion, Flotation, Extractive Metallurgy, Machining, Metal Joining, Metal Working, Physical Metallurgy, Powder Metallurgy, *and* Welding

Metal Plating
- American Hot Dip Galvanizers Association, Inc., 16
- American Zinc Institute, Inc., 30
- International Nickel Co., Inc., 89
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Norris Metallurgy Research Laboratory, 211
    - Reno Metallurgy Research Center, 214
    - Salt Lake City Metallurgy Research Center, 214

Metals
- Aerojet-General Corp. Aerojet-General Nucleonics, 1
- American Bureau of Metal Statistics, 7
- American Society for Metals, 25
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Belfour Engineering Co. Mechanical Properties and Data Center, 41
- Cambridge Communications Corp., 48
- Carborundum Co., 49
- Carrier Research & Development Co. Logan-Lewis Library, 51
- Cheminform Institute, 53
- Crucible Steel Co. of America, 60
- Illinois Institute of Technology. IIT Research Institute, 81
- International Nickel Co., Inc., 89
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- National Lead Co. Titanium Alloy Manufacturing Division, 133
- National Research Corp., 134
- Oak Ridge National Laboratory. Research Materials Information Center, 142
- Olin Mathieson Chemical Corp. Olin Research Center, 146
- Society for Nondestructive Testing, 168
- Stanford Research Institute, 172
- U.S. Department of Defense. Department of the Air Force. Air Force Materials Laboratory (MAAM), 203
- U.S. Department of the Interior.
  - Office of Minerals and Solid Fuels, 224
  - Bureau of Mines:
    - Albany Metallurgy Research Center, 208
    - College Park Metallurgy Research Laboratory, 211
    - Norris Metallurgy Research Laboratory, 211
    - Rolla Metallurgy Research Center, 214
- U.S. Department of the Treasury. Bureau of Customs, 225

Metals—Continued
- University of Dayton. Research Institute, 242
- University of Illinois. Physics Library, 246
- University of New Hampshire. Engineering Experiment Station, 253
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
- *See also* Alkaline Earths, Alloys, Platinum Metals, Rare Earths, Refractory Metals, *and* individual names of metals

Metal Stamping
- American Metal Stamping Association, 19

Metal Statistics
- American Bureau of Metal Statistics, 7

Metalworking
- Allegheny Ludlum Steel Corp. Research Center Library, 4
- American Society for Quality Control, 26
- American Society of Tool and Manufacturing Engineers, 29
- Armco Steel Corp. Research Center, 33
- Associated Spring Corp., 34
- Bethlehem Steel Co. Homer Research Laboratories, 42
- International Nickel Co., Inc., 89
- Mueller Brass Co., 110
- Reynolds Metals Co. Technical Information Center, 159

Meteorites
- Massachusetts Institute of Technology. Department of Geology and Geophysics, 102
- Miami University. Geology Museum and Map Library, 106
- Smithsonian Institution:
  - Astrophysical Observatory, 165
  - U.S. National Museum:
    - Museum of Natural History, 167
- University of Michigan. Mineral Museum, 249

Meteorological Satellites, *see* Satellites

Meteorology
- Aerophysics Research Foundation, 2
- Air Pollution Control Association, 3
- Allen Weather Corp., 4
- American Meteorological Society, 19
- Arthur D. Little, Inc., 33
- Bay Area Air Pollution Control District, 41
- Booz, Allen Applied Research, Inc., 44
- Brookhaven National Laboratory, 45
- Columbia University. Geology Library and University Map Room, 57
- Cranbrook Institute of Science, 59
- Duke University. Biology—Forestry Library, 63
- Federal Aviation Agency:
  - Aeronautical Center Library Service, 67
  - Alaskan Region Library, 67
  - Headquarters Library, 68
- Franklin Institute. Weather Center, 71
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- Indiana University. Geology Library, 84

Meteorology—Continued
  Litton Systems, Inc. Applied Science Division Library, 97
  Massachusetts Institute of Technology:
    Lindgren Library, 103
    Science Library, 103
    Weather Radar Research Project, 104
  Melpar, Inc. Technical Information Center, 105
  Miami University. Weather Information Center, 107
  Midwest Inter-Library Center, 108
  The National Academy of Sciences—National Research Council:
      U.S. National Committee for International Years of the Quiet Sun, 125
      World Data Center A, 126
  National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
  National Center for Atmospheric Research:
    High Altitude Observatory Library, 130
    NCAR Library, 130
  Pennsylvania Department of Health. Division of Air Pollution Control, 149
  Rutgers—The State University. New Jersey College of Agriculture Library, 161
  Solar Energy Society. Technical Research Science Center, 170
  Tennessee Valley Authority. Technical Library, 177
  U.S. Department of Commerce.
    National Bureau of Standards:
      NBS Library, 195
    Weather Bureau, 201
  U.S. Department of the Treasury. U.S. Coast Guard. Office of Operations, 227
  University of Arizona. Institute of Atmospheric Physics, 236
  University of California, Los Angeles. Engineering and Mathematical Sciences Library, 239
  University of Puerto Rico. Institute of Tropical Meteorology, 261
  The University of Texas:
    Engineering Library, 264
    Geology Library, 264
  Woods Hole Oceanographic Institution, 274
  See also Airglow, Aurorae, Climatology, Ionosphere, *and* Weather Forecasting

Metrology
  American Institute of Physics, 17
  American Ordnance Association, 21
  DoAll Co., 62
  Duodecimal Society of America, Inc., 64
  Society for Nondestructive Testing, 168
  U.S. Department of Commerce.
    National Bureau of Standards:
      NBS Library, 195
      Office of Weights and Measures Library, 197

Microbiocides
  Fine Organics, Inc., 68
  Nalco Chemical Co., 111

Microbiology
  American Bio-Synthetics Corp., 7
  Campbell Soup Co., 48

Microbiology—Continued
  Columbia University. Medical Library, 57
  Georgia Institute of Technology. Technical Information Section, 74
  Hazleton Laboratories, Inc., 79
  Institute for Muscle Disease, Inc., 86
  The Institute of Paper Chemistry, 87
  Iowa State University of Science and Technology. Systematic Bacteriology Research Group, 91
  Mead Johnson & Co., 104
  National Canners Association, 130
  New York Academy of Sciences, 137
  Ohio State University. Pharmacy and Microbiology Library, 146
  Rutgers—The State University:
    Institute of Microbiology, 161
    Newark Colleges Library, 161
  Schering Corp., 163
  Stanford University. Lane Medical Library, 173
  Sun Oil Co. Research and Development Library, 176
  U.S. Department of Agriculture. Agricultural Research Service. National Animal Disease Laboratory, 183
  University of California, Los Angeles. Biomedical Library, 239
  University of Illinois. Biology Library, 245
  University of Kentucky. University Libraries, 248
  University of Pennsylvania. Biology Library, 257
  Warner-Lambert Pharmaceutical Co. Warner-Lambert Research Institute, 270
  See also Algology, Bacteriology, Fermentation Processes, Gnotobiotics, Mycology, Parasitology, *and* Virology

Micropaleontology
  American Museum of Natural History, 19
  McLean Paleontological Laboratory, 99
  The University of Texas. Geology Library, 264

Microscopy
  Harvard University. Biology Laboratories, 76
  The Institute of Paper Chemistry, 87
  Manlabs, Inc., 100
  Massachusetts Institute of Technology. Science Library, 103
  New York Microscopical Society, 138
  U.S. Department of the Treasury. Bureau of Engraving and Printing, 226
  University of New Hampshire. Engineering Experiment Station, 253
  Westinghouse Electric Corp. Engineering Library, 272
  See also Electron Microscopy and Optics

Microwaves
  Derivation & Tabulation Associates, Inc., 61
  Philips Laboratories, 150
  Troxler Electronic Laboratories, Inc., 179
  U.S. Department of Commerce.
    National Bureau of Standards:
      Electron Devices Data Service, 193
      Radio Standards Laboratory, 197
  University of Colorado. Engineering Research Center, 241

Military Science and Technology
- Booz, Allen Applied Research, Inc., 44
- Franklin Institute. Laboratories for Research and Development, 70
- Hayes International Corp., 79
- Magnavox Co., 99
- Massachusetts Institute of Technology. Lincoln Laboratory, 103
- Melpar, Inc. Technical Information Center, 105
- Raytheon Corp. Submarine Signal Operations Library, 158
- Republic Aviation Corp. Engineering Library, 158
- Science Communication, Inc., 163
- Texas A & M University. Cushing Memorial Library, 177
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - School of Aerospace Medicine, 203
- University of Michigan. Infrared Information and Analysis Center, 249
- The University of Texas:
  - Defense Research Laboratory, 264
  - Military Physics Research Laboratory, 265
- *See also* Ammunition, Antisubmarine Warfare, Artillery, Ballistics, Biological Warfare, Chemical Warfare, Ordnance, Radiological Warfare, *and* Weapons and Weapon Systems

Mineralogy
- American Museum of Natural History, 19
- Arctic Institute of North America. Arctic Bibliography Project, 32
- Arthur D. Little, Inc., 33
- Battelle Memorial Institute. Library, 40
- Buffalo Museum of Science, 45
- Carnegie Institution of Washington. Geophysical Laboratory, 50
- Colorado School of Mines Research Foundation, Inc., 56
- Columbia University. Geology Library and University Map Room, 57
- Cranbrook Institute of Science, 59
- Foote Mineral Co., 69
- Geosurveys, 75
- Harvard University. Geological Sciences Library, 77
- Illinois Institute of Technology. IIT Research Institute, 81
- Illinois State Geological Survey, 82
- Indiana University. Geology Library, 84
- The Institute of Paper Chemistry, 87
- Miami University. Geology Museum and Map Library, 106
- Michigan Technological University. Institute of Mineral Research, 107
- Mineralogical Society of America, 109
- Minnesota Mining & Manufacturing Co. Abrasives Library, 109
- Ohio State University. Lord Hall Library, 145
- Smithsonian Institution. U.S. National Museum. Museum of Natural History, 169
- U.S. Department of the Interior. Geological Survey, 221
- University of Colorado. Museum, 242
- University of Illinois. Geology Library, 246

Mineralogy—Continued
- University of Michigan:
  - Mineral Museum, 249
  - Museum of Paleontology, 250
- University of Nevada. Nevada Mining Analytical Laboratory, 253
- University of North Carolina. Geology Library, 254
- University of Oklahoma. Geology Library, 256
- The University of Texas. Geology Library, 264

Mineral Resources and Industries
- American Bureau of Metal Statistics, 7
- Carl A. Bays & Associates, Inc., 49
- Delaware Geological Survey, 61
- Georgia Institute of Technology. Technical Information Section, 74
- Geosurveys, 75
- Illinois State Geological Survey, 82
- Kansas State Geological Survey, 93
- Michigan Technological University. Institute of Mineral Research, 107
- National Lead Co. Baroid Division, 133
- Resources for the Future, Inc., 159
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Office of Program Coordination, 211
    - Office of the Assistant Director, Mineral Resource Development, 213
  - Library, 223
  - Office of Minerals and Solid Fuels, 224
- University of Arizona. Arizona Bureau of Mines, 235
- University of Kentucky. Kentucky Geological Survey, 247
- University of Michigan:
  - Museum of Paleontology, 250
  - Subsurface Laboratory and Core Library, 251
- University of Nevada:
  - Mackay School of Mines, 252
  - Nevada Bureau of Mines, 252
- The University of Texas. Bureau of Economic Geology, 263
- University of Wyoming. Natural Resources Research Institute, 268
- *See also* Bauxite, Clay, Coal, Lignite, *and* Petroleum

Mineral Wool
- National Mineral Wool Insulation Association, 133

Mining
- Carl A. Bays & Associates, Inc., 49
- Colorado School of Mines Research Foundation, Inc., 56
- Columbia University. Engineering Library, 56
- Engineering Societies Library, 65
- Michigan Technological University:
  - Institute of Mineral Research, 107
  - Library, 108
- National Coal Association. Bituminous Coal Research, Inc., 131
- National Lead Co. Baroid Division, 133
- New York Public Library, 138
- Ohio State University. Lord Hall Library, 145
- Stanford University. Branner Geological Library, 172

Mining—Continued
- U.S. Department of the Interior:
  - Bureau of Mines, 207
  - Library, 223
  - Office of Coal Research, 224
- University of Arizona:
  - Arizona Bureau of Mines, 235
  - Library, 236
- University of Nevada:
  - Mackay School of Mines, 252
  - Nevada Bureau of Mines, 252
- *See also* Hydraulic Mining

Missiles and Rockets
- Aerojet-General Corp.:
  - Corporate Technical Information Center, 1
  - Technical Library, 2
- Aerospace Industries Association of America, Inc., 2
- American Ordnance Association, 21
- American Society for Quality Control, Inc., 26
- Avco Corp.:
  - Avco-Everett Research Laboratory, 36
  - Lycoming Division, 37
  - Ordnance Division, 37
  - Technical Communications Department, 37
- Battelle Memorial Institute. Battelle-Defender, 38
- The Boeing Co. Aero-Space Division, 43
- Douglas Aircraft Co., Inc. Douglas Corporate Library, 62
- Engineering Societies Library, 65
- Geo-Science, Inc., 75
- Hayes International Corp., 79
- Institute for Scientific Information, 86
- Magnavox Co., 99
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- New York University. Project SETE, 138
- Raytheon Co.:
  - Bedford Complex Library, 157
  - Missile Systems Division Engineering Reference Library, 157
- Republic Aviation Corp. Engineering Library, 158
- Ryan Aeronautical Co. Engineering Library, 162
- TRW Space Technology Laboratories, 179
- U.S. Department of Defense. Defense Documentation Center, 202

Mollusks, *see* Malacology

Molybdenum
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Climax Molybdenum Co., 54
- U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209

Mossbauer Effect
- North American Aviation, Inc. Mossbauer Effect Data Group, 240
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Mosses, *see* Bryology

Museums
- American Association of Museums, 6

Mycology
- Academy of Natural Sciences of Philadelphia, 1
- American Museum of Natural History, 19
- Association of Allergists for Mycological Investigations, Inc., 34
- Chas. Pfizer & Co., Inc. Medical Research Laboratories, 53
- Duke University. Biology-Forestry Library, 63
- Harvard University. Farlow Reference Library, 77
- University of Colorado. Museum, 242
- University of Illinois. Herbarium, 246
- University of Michigan. University Herbarium, 251
- University of North Carolina. Botany Library, 253

Narcotics
- The National Academy of Sciences—National Research Council. Committee on Drug Addiction and Narcotics, 114
- U.S. Department of the Treasury
  - Bureau of Customs, 225
  - Internal Revenue Service:
    - National Office Laboratory, 227

Natural Gas
- American Gas Association, 13
- American Petroleum Institute, 22
- O'Neill Geothermal, Inc., 147
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Laramie Petroleum Research Center, 210
    - San Francisco Petroleum Research Laboratory, 215
  - Office of Oil and Gas, 225

Natural History
- Academy of Natural Sciences of Philadelphia, 1
- American Museum of Natural History, 19
- Buffalo Museum of Science, 45
- Illinois Natural History Survey, 82
- Institute for Fisheries Research, 85
- Museum of Northern Arizona, 111
- National Audubon Society, 129
- San Diego Natural History Museum, 162
- Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
- Stanford University. Falconer Biology Library, 173
- U.S. Department of the Interior. Library, 222
- University of Michigan. Science and Engineering Libraries, 250

Natural Resources
- National Wildlife Federation, 136
- Ohio State University:
  - Natural Resources Institute, 145
  - Ohio Cooperative Wildlife Research Unit, 146
- Resources for the Future, Inc., 159
- Reynolds Metals Co. Technical Information Center, 159
- Soil Conservation Society of America, 169
- Stanford Research Institute, 172
- U.S. Department of the Interior:
  - Division of Information, Office of the Secretary, 216
  - Library, 222
- University of Wyoming. Natural Resources Research Institute, 268

Natural Resources—Continued
- Wildlife Management Institute, 274
- *See also* Conservation

Nautical Charts, *see* Oceanographic Maps and Charts

Naval Engineering, *see* Marine Engineering

Naval Stores
- American Society for Testing and Materials, 26
- Hercules Research Center, 80
- U.S. Department of Agriculture. Agricultural Research Service. Southern Utilization Research and Development Division, 183

Navigation
- American Astronautical Society, 7
- Federal Aviation Agency:
  - Aeronautical Center Library Service, 67
  - National Aviation Facilities Experimental Center, 68
- Franklin Institute. Laboratories for Research and Development, 70
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- New York Public Library, 138
- Pickard & Burns, Inc., 150
- Raytheon Co. Wayland Library, 158
- Republic Aviation Corp. Engineering Library, 158
- U.S. Department of Commerce. National Bureau of Standards. Radio Systems Division, 198
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Army:
    - Coastal Engineering Research Center, 204
  - Department of the Navy:
    - U.S. Naval Observatory, 205
- U.S. Department of the Interior. Bureau of Reclamation, 215
- U.S. Department of the Treasury. U.S. Coast Guard. Office of Engineering, 227

Neoplastic Diseases, *see* Oncology

Neurology
- American Electroencephalographic Society, 11
- College of Physicians of Philadelphia, 55
- Columbia University. Medical Library, 57
- Denver Medical Society, 61
- Institute for Muscle Disease, Inc., 86
- Library of Congress. Science and Technology Division, 96
- Massachusetts Institute of Technology. Neurosciences Research Information Center, 103
- U.S. Department of Health, Education, and Welfare Public Health Service

Neurosurgery, *see* Surgery

Neutrons, *see* Nuclear Science and Technology

Nickel
- International Nickel Co., Inc., 89

Nitrofurans
- The Norwich Pharmacal Co. Scientific Information Division, 140

Nondestructive Testing, *see* Testing

Nuclear Reactors
- Aerojet-General Corp. Corporate Technical Information Center, 1
- American Nuclear Society, 20
- Argonne National Laboratory. ANS Argonne Code Center, 32
- Atomic Industrial Forum, Inc., 35
- Franklin Institute. Laboratories for Research and Development, 70
- Georgia Institute of Technology. Technical Information Section, 74
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- National Reactor Testing Station. Technical Library, 134
- North American Aviation, Inc. Atomics International, 140
- Nuclear Metals, Inc., 140
- Oak Ridge National Laboratory. Nuclear Safety Information Center, 142
- University of Washington. Nuclear Reactor Laboratories, 268

Nuclear Science and Technology
- Aerojet-General Corp.:
  - Aerojet-General Nucleonics, 1
  - Corporate Technical Information Center, 1
- Allied Research Associates, Inc., 4
- Allis Chalmers Manufacturing Co., 5
- American Nuclear Society, 20
- American Society for Metals, 25
- Atomic Industrial Forum, Inc., 35
- Battelle Memorial Institute:
  - Library, 40
  - Radiation Effects Information Center, 40
- Brookhaven National Laboratory, 45
- Columbia University. Physics Library, 57
- Duke University:
  - Chemistry Library, 63
  - Mathematics-Physics Library, 64
- Engineering Societies Library, 65
- Franklin Institute. Laboratories for Research and Development, 70
- Georgia Institute of Technology. Technical Information Section, 74
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- High Voltage Engineering Corp., 80
- Indiana University. Astronomy-Physics-Mathematics Library, 83
- Institute for Scientific Information, 86
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- Isotopes, Inc., 91
- The John Crerar Library, 92
- Litton Systems, Inc. Applied Science Division Library, 97
- Louisiana State University. Nuclear Science Center, 98
- Mallinckrodt Chemical Works. Uranium Division, 99
- Massachusetts Institute of Technology:
  - Laboratory for Nuclear Science Research Reading Room, 103
  - Science Library, 103

Nuclear Science and Technology—Continued
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- National Center for Atmospheric Research. NCAR Library, 130
- National Reactor Testing Station. Technical Library, 134
- New Mexico Highland University. Institute of Scientific Research, 137
- North American Aviation, Inc. Atomics International, 140
- Nuclear Metals, Inc., 140
- Oak Ridge Institute of Nuclear Studies, 141
- Oak Ridge National Laboratory:
  - Charged-Particle Cross Section Information Center, 141
  - Nuclear Safety Information Center, 142
  - Oak Ridge National Laboratory Library, 142
- Ohio State University. Cole Memorial Library of Physics, 144
- Princeton University:
  - Accelerator Library, 153
  - Engineering Library, 153
  - Plasma Physics Laboratory Library, 153
- Purdue University. Engineering Experiment Station, 155
- Republic Aviation Corp. Engineering Library, 158
- Rensselaer Polytechnic Institute, 158
- Sadtler Research Laboratories, 162
- Southern Methodist University. Science Library, 171
- Stanford Research Institute, 172
- Texas A & M University. Cushing Memorial Library, 177
- United Aircraft Corp. Research Library, 179
- United Nuclear Corp., 180
- U.S. Atomic Energy Commission. Division of Technical Information Extension, 180
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Atomic Energy Levels Information Center, 192
    - Atomic Transition Probabilities Data Center, 192
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - Office of Aerospace Research, 203
- University of California. Lawrence Radiation Laboratory, 237
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Colorado:
  - Joint Institute for Laboratory Astrophysics, 241
  - Regional Technical Report Center, 242
- University of Florida:
  - Engineering and Physics Library, 244
  - Chemistry Library, 244
- University of Illinois:
  - Engineering Library, 245
  - Physics Library, 246
- University of Michigan. Michigan Memorial-Phoenix Project, 249
- University of North Carolina. Mathematics-Physics Library, 254
- University of Oklahoma:
  - Government Depository Library, 256
  - Physics Library, 257
- University of Pennsylvania. Towne Scientific Library, 260

Nuclear Science and Technology—Continued
- University of Puerto Rico. General Library, 261
- University of Toledo. Library, 265
- University of Washington. Nuclear Reactor Laboratories, 268
- Westinghouse Electric Corp. Westinghouse Atomic Power Division, 272
- West Virginia University. General Library, 273
- *See also* Particle Accelerators, Radiation, Radiation Effects, *and* Uranium

Numerical Analysis, *see* Mathematics *and* Statistics

Nursing
- American Psychiatric Association, 24
- Forest Park Foundation, 69
- Indiana University. School of Medicine Library, 84
- Kentucky State Health Department, 93
- Louisiana State University. School of Medicine, 99
- Mississippi State Medical Association, 110
- New Mexico Nurses' Association, 137
- New York Academy of Medicine, 137
- Ohio State University. Health Center Library of Medicine, 144
- Sophia F. Palmer Library, 170
- Texas Medical Center Library, 178
- U.S. Department of Health, Education, and Welfare. Public Health Service, 206
- U.S. Veterans Administration. Medical and General Reference Library, 229
- University of California, Los Angeles. Biomedical Library, 239
- University of Colorado:
  - Libraries, 242
  - Medical Center, 242
- University of Florida. J. Hillis Miller Health Center Library, 244
- University of Kentucky. Medical Center, 247
- University of Michigan. Medical Center Library, 249
- University of North Carolina. Division of Health Affairs, 254
- University of Pennsylvania:
  - Nursing School Library, 259
  - Walter P. Murphy Memorial Library, 260
- Western Reserve University. Freiberger Library, 272

Nutrition
- American Farm Research Association, 12
- American Fisheries Society, 12
- Campbell Soup Co., 48
- Colorado State University. University Libraries, 56
- Kentucky State Health Department, 93
- Lilly Research Laboratories, 97
- Marine Chemurgics, Inc., 100
- Massachusetts Institute of Technology:
  - Department of Nutrition and Food Science, 102
  - Science Library, 103
- Mead Johnson & Co., 104
- Meals for Millions Foundation, 104
- The National Academy of Sciences—National Research Council. Food and Nutrition Board, 118
- The National Vitamin Foundation, Inc., 136
- New York Academy of Medicine, 137

Nutrition—Continued
  Rutgers—The State University:
    New Jersey Agricultural Experiment Station, 161
    New Jersey College of Agriculture Library, 161
  Texas A & M University. Texas Agricultural Experiment Station, 178
  U.S. Department of Agriculture:
    Cooperative State Research Service, 184
    National Agricultural Library, 185
  U.S. Veterans Administration. Medical and General Reference Library, 229
  University of Kentucky. Agricultural Experiment Station, 247
  University of Notre Dame. Lobund Laboratory, 255
  University of Pittsburgh. Graduate School of Public Health Library, 261
  University of Wyoming. Agricultural Experiment Station, 268
  West Virginia University. West Virginia Agricultural Experiment Station, 274

Obstetrics, *see* Medicine

Occupational Medicine
  American Petroleum Institute, 22
  The Boeing Co. Airplane Division—Wichita Branch, 44
  U.S. Department of Health, Education and Welfare. Public Health Service, 206
  U.S. Department of the Interior. Bureau of Mines. Office of the Assistant Director, Health and Safety, 211
  University of Michigan. Public Health Library, 250
  University of Pittsburgh. Graduate School of Public Health Library, 261
  University of Washington. Environmental Health Division, 267

  See also Industrial Hygiene

Occupational Therapy, *see* Rehabilitation

Oceanographic Maps and Charts
  American Geographical Society, 14
  U.S. Department of Commerce. Coast and Geodetic Survey. Office of Oceanography, 189

Oceanography
  Aerojet-General Corp. Corporate Technical Information Center, 1
  Allen Weather Corp., 4
  American Meteorological Society, 19
  Arctic Institute of North America. Arctic Bibliography Project, 32
  Columbia University. Geology Library and University Map Room, 57
  Columbia University. Geoscience Library, 57
  Duke University. Marine Laboratory, 64
  Gulf Coast Research Laboratory, 75
  Harvard University:
    Gordon McKay Library of Engineering and Applied Physics, 77
    Museum of Comparative Zoology, 78
  International Oceanographic Foundation, 89
  Marine Biological Laboratory, 100

Oceanography—Continued
  Massachusetts Institute of Technology:
    Department of Geology and Geophysics, 102
    Hydrodynamics Laboratory, 102
    Lindgren Library, 103
  The National Academy of Sciences—National Research Council. World Data Center A, 126
  National Center for Atmospheric Research. NCAR Library, 130
  Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
  U.S. Department of Commerce. Coast and Geodetic Survey. Office of Oceanography, 189
  U.S. Department of Defense. Department of the Navy. U.S. National Oceanographic Data Center, 205
  U.S. Department of the Interior.
    Fish and Wildlife Service:
      Bureau of Commercial Fisheries, 217
    Geological Survey, 221
  U.S. Department of the Treasury. U.S. Coast Guard. Office of Operations, 227
  University of California, San Diego. Scripps Institution of Oceanography, 240
  University of Illinois. Geology Library, 246
  University of Rhode Island. Narragansett Marine Laboratory, 263
  University of Washington:
    Applied Physics Laboratory, 267
    University Library, 268
  Woods Hole Oceanographic Institution, 274

Odontology, *see* Dentistry

Oils, *see* Fats and Oils

Oilseed, *see* Fats and Oils

Oil Shale
  U.S. Department of the Interior.
    Bureau of Mines:
      Bartlesville Petroleum Research Center, 209
      Laramie Petroleum Research Center, 210

Oil Wells, *see* Petroleum

Oncology
  American Cancer Society, Inc., 8
  Columbia University. Medical Library, 57
  Public Health Federation of the Cincinnati Area, 154
  U.S. Veterans Administration. VA Cancer Registry, 235
  University of Notre Dame. Lobund Laboratory, 255
  The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263

Operations Research
  Avco Corp. Technical Communications Department, 37
  The Boeing Co. Airplane Division—Wichita Branch, 44
  Booz, Allen Applied Research, Inc., 44
  Case Institute of Technology, 51
  Computer Concepts, Inc., 58
  Dunlap & Associates, Inc., 64
  Franklin Institute. Laboratories for Research and Development, 70
  George Washington University. Logistics Research Project, 74

Operations Research—Continued
- Georgia Institute of Technology. Rich Electronic Computer Center, 74
- Humble Oil & Refining Co. Houston Research Library, 81
- The Science Bureau of the Metropolitan Washington Board of Trade, 163
- System Development Corp., 176
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Applied Mathematics Division, 192
    - Research Information Center and Advisory Service on Information Processing, 198

Ophthalmology
- American Optometric Association, 21
- College of Physicians of Philadelphia, 55
- Columbia University. Medical Library, 57
- Los Angeles College of Optometry, 98
- The National Academy of Sciences—National Research Center. Armed Forces—NRC Committee on Vision, 113
- National Society for the Prevention of Blindness, 136
- Ohio State University:
  - Health Center Library of Medicine, 144
  - Institute for Research in Vision, 145
- Stanford University. Lane Medical Library, 173

Opiates, *see* Narcotics

Optics
- Aerojet-General Corp. Technical Library, 1
- American Institute of Physics, 17
- Barnes Engineering Co., 38
- Columbia University. Physics Library, 57
- Fluidyne Engineering Corp., 69
- Geoscience, Inc., 75
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- Los Angeles College of Optometry, 98
- New York Microscopical Society, 138
- Ohio State University:
  - Health Center Library of Medicine, 144
  - Institute for Research in Vision, 145
- Optical Society of America, 147
- Philips Laboratories, 150
- Technicolor Corp., 176
- Texas Instruments, Inc. Corporate Technical Information Center, 178
- U.S. Department of Commerce. National Bureau of Standards. Metrology Division, 195
- University of Michigan. Infrared Information and Analysis Center, 249

Optometry
- American Optometric Association, 21
- Los Angeles College of Optometry,98
- University of California, Berkeley. General Library, 238
- University of Houston. Libraries, 245

Oral Surgery
- American Academy of Implant Dentures, 5
- American Dental Association, 10
- Indiana University. School of Dentistry Library, 84

Ordnance
- Aerojet-General Corp.:
  - Corporate Technical Information Center, 1
  - Technical Library, 1
- American Ordnance Association, 21
- Avco Corp. Ordnance Division, 37
- Republic Aviation Corp. Engineering Library, 158
- U.S. Department of Defense. Defense Documentation Center, 202

Ores, *see* Mineral Resources and Industries.

Organic Chemistry
- Allied Chemical Corp. Center Research Laboratory, 4
- American Chemical Society, 8
- American Cyanamid Co., 10
- American Forest Products Industries, Inc., 12
- American Oil Chemists' Society, 20
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
- Chas. Pfizer & Co., Inc. Medical Research Laboratories, 53
- Celanese Corporation of America:
  - Celanese Chemical Co., 52
  - Summit Research Laboratories, 52
- Chemical Rubber Publishing Co., 53
- Colgate-Palmolive Co., 55
- Columbia University. Chemistry Library, 56
- Ethyl Corp. Chemical Research and Development Library, 66
- Fine Organics, Inc., 68
- General Aniline & Film Co.:
  - Central Research Laboratory, 72
  - Rensselaer Library and Technical Information Service, 72
  - Research and Development Laboratory, 72
- Georgia Institute of Technology. Technical Information Section, 74
- Hazleton Laboratories, Inc., 79
- Hoffman-La Roche, Inc., 80
- Illinois Institute of Technology. IIT Research Institute, 81
- Indiana University. Chemistry Library, 84
- Institute for Muscle Disease, Inc., 86
- The Institute of Paper Chemistry, 87
- Mead Johnson & Co., 104
- Medical Chemicals Corp., 104
- New Mexico Highlands University. Institute of Scientific Research, 137
- Nopco Chemical Co., 139
- Olin Mathieson Chemical Corp. Olin Research Center, 146
- Pennsalt Chemicals Corp., 149
- Philip Morris Inc., 150
- Princeton University. Chemistry Library, 153
- Rochester Institute of Technology. Library, 160
- Schering Corp., 163
- Shulton, Inc., 164
- Southern Research Institute, 172
- Stanford University. Swain Library of Chemistry, 173
- Sun Oil Co. Research and Development Library, 176

Organic Chemistry—Continued
- Technicolor Corp., 176
- Textron, Inc., 178
- Universal Oil Products Co. Research Library, 235
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Florida. Chemistry Library, 244
- Wyandotte Chemical Corp. Research Library and Technical Information Center, 275
- *See also* Hydrocarbons

Ornithology
- American Institute of Physics, 17
- American Museum of Natural History, 19
- Buffalo Museum of Science, 45
- California Academy of Sciences, 46
- Duke University. Biology—Forestry Library, 63
- Gulf Coast Research Laboratory, 75
- Harvard University. Museum of Comparative Zoology, 78
- Hawaii Medical Library, 79
- National Audubon Society, 129
- New York Zoological Society, 139
- Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
- U.S. Department of the Interior.
  - Fish and Wildlife Service.
    - Bureau of Sport Fisheries and Wildlife:
      - Bird and Mammal Laboratories, 218
      - Patuxent Wildlife Research Center, 218
- University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
- University of Illinois. Biology Library, 245
- University of Michigan. Museum of Zoology, 250

Ornithopters, *see* Aircraft

Orthopedics
- American Orthotics and Prosthetics Association, 21
- Columbia University. Medical Library, 57
- National Society for Crippled Children and Adults, 135

Orthoptics, *see* Ophthalmology

Orthotics
- American Orthotics and Prosthetics Association, 21
- The National Academy of Sciences—National Research Council. Committee on Prosthetic-Orthotic Education, 115
- *See also* Prosthetics

Osmium, *see* Platinum Metals

Osteopathy
- Sutherland Cranial Teaching Foundation, Inc., 176

Otolaryngology
- American Speech and Hearing Association, 29
- Stanford University. Lane Medical Library, 173

Pacific Research
- Bernice P. Bishop Museum, 42
- Pacific Scientific Information Center, 148
- Pacific Vegetation Project, 148

Packaging
- American Ordnance Association, 21
- American Society for Testing and Materials, 26
- American Society of Industrial Designers, 28
- General Foods Corp., 73
- The Institute of Paper Chemistry, 87
- The National Academy of Sciences—National Research Council. Maritime Cargo Transportation Conference, 121
- National Canners Association, 130
- Olin Mathieson Chemical Corp. Olin Research Center, 146
- Philip Morris Inc., 150
- Reynolds Metals Co. Technical Information Center, 159
- U.S. Department of Defense. Department of the Army. Plastics Technical Evaluation Center, 204
- Winzen Research, Inc., 274

Paints and Lacquers
- Adhesive Products Corp., 1
- American Society for Testing and Materials, 26
- American Zinc Institute, Inc., 30
- Archer-Daniels-Midland Co. T. L. Daniels Research Center, 32
- E. I. DuPont de Nemours & Co., Inc. Technical Library, 64
- Foster D. Snell, Inc., 70
- General Mills, Inc. Central Research Libraries, 73
- Metal Powder Industries Federation-American Powder Metallurgy Institute, 105
- National Gallery of Art. Research Laboratory, 13
- National Paint, Varnish and Lacquer Association, 134
- Purdue University. Joint Highway Research Project, 155
- Standard Ultramarine and Color Co., 171
- Tempil Corp., 177
- Textron, Inc., 178
- *See also* Varnishes

Paleontology
- American Museum of Natural History, 19
- Buffalo Museum of Science, 45
- Carnegie Institution of Washington. Geophysical Laboratory, 50
- Gulf Coast Research Laboratory, 75
- Harvard Unuiversity. Museum of Comparative Zoology, 78
- Indiana University. Geology Library, 84
- Louisiana State University. Main Library, 98
- McLean Paleontological Laboratory, 99
- Miami University. Geology Museum and Map Library, 106
- Museum of Northern Arizona, 111
- Ohio State University. Orton Memorial Library of Geology, 146
- Paleontological Research Institution, 148
- Princeton Unuiversity. Biology and Geology Library, 153
- Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
- Society of Vertebrate Paleontology, 169
- Southern California Academy of Sciences, 170
- Stanford University. Branner Geological Library, 172

Paleontology—Continued
- U.S. Department of the Interior:
  - Geological Survey, 221
  - National Park Service, 223
- University of Arizona. Laboratory of Tree Ring Research, 236
- University of Colorado. Museum, 242
- University of Illinois. Geology Library, 246
- University of Michigan:
  - Museum of Paleontology, 250
  - Science and Engineering Libraries, 250
- University of Oklahoma. Geology Library, 256
- The University of Texas. Geology Library, 264
- *See also* Micropaleontology

Palynology
- University of Oklahoma. Palynology Research Center 257

Paper
- American Society for Testing and Materials, 26
- Battelle Memorial Institute. Library, 40
- General Services Administration. National Archives and Records Service, 73
- Hercules Research Center, 80
- The Institute of Paper Chemistry, 87
- Karl M. Fox Consulting Research Service and Library, 93
- Library of Congress. Collections Maintenance and Preservation Office, 95
- Nalco Chemical Co., 111
- National Gallery of Art. Research Laboratory, 132
- New York Public Library, 138
- Nopco Chemical Co., 139
- Owens-Illinois Glass Co. Technical Center and Research Library, 147
- Sulphite Pulp Manufacturers' Research League, 175
- U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195
- U.S. Department of Treasury. Bureau of Engraving and Printing, 226
- University of Florida. Florida Engineering and Industrial Experiment Station, 244

Parachutes, *see* Aerial Recovery

Parasitology
- Duke University. Marine Laboratory, 64
- New Mexico Highlands University. Institute of Scientific Research, 137
- Ohio State University. Ohio Cooperative Wildlife Research Unit, 146
- University of Nevada. Agricultural Experiment Station, 252
- University of Notre Dame. Lobund Laboratory, 255
- University of Pennsylvania. Biology Library, 257

Particle Accelerators
- High Voltage Engineering Corp., 80
- Ion Physics Corp., 89
- Massachusetts Institute of Technology. Cambridge Electron Accelerator Library, 101
- Princeton University. Accelerator Library, 153
- Stanford University. Stanford Linear Accelerator Center, 173
- University of Illinois. Physics Library, 246

Patents
- American Society for Metals, 25
- Atomic Industrial Forum, Inc., 35
- Automobile Manufacturers Association, 36
- Carnegie Library of Pittsburgh, 50
- Franklin Institute. Library, 71
- Georgia Institute of Technology. Price Gilbert Memorial Library, 74
- Illinois Institute of Technology. Institute of Gas Technology, 81
- Information for Industry, Inc., 85
- The Institute of Paper Chemistry, 87
- Institute of Textile Technology, 88
- The John Crerar Library, 92
- Midwest Research Institute. Germanium Information Center, 108
- National Coal Association. Bituminous Coal Research, Inc., 131
- National Paint, Varnish and Lacquer Association, 134
- Ohio State University:
  - Davis Welding Library, 144
  - Main Library, 145
- Princeton University. Plasma Physics Laboratory Library, 153
- Rutgers—The State University:
  - Central Library, 161
  - Institute of Microbiology, 161
- Southern Research Institute, 172
- U.S. Department of Commerce. Patent Office, 198
- U.S. Department of the Interior:
  - Bureau of Mines:
    - College Park Metallurgy Research Center, 209
    - Laramie Petroleum Research Center, 210
- U.S. Veterans Administration. Prosthetic and Sensory Aids Service, 234
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Maine. Raymond H. Fogler Library, 248
- University of Rhode Island. College of Pharmacy, 262
- University of Tulsa:
  - Information Services Department, 266
  - Sidney Born Technical Library, 266

Pathology
- Chas. Pfizer & Co., Inc. Medical Research Laboratories, 53
- Columbia University. Medical Library, 57
- Hazelton Laboratories, Inc., 79
- Indiana University. Anatomy-Physiology Library, 83
- Institute for Muscle Disease, Inc., 86
- National Chiropractic Association, 131
- Straub Clinic, 175

Pattern Recognition, *see* Computer Science

Pediatrics, *see* Medicine

Permafrost
- Library of Congress. Science and Technology Division, 96
- The National Academy of Sciences—National Research Council. Building Research Advisory Board, 113

- **Permanganates**
  - Carus Chemical Co. Permanganate Information Service, 51
- **Pest Control**
  - American Camellia Society, 7
  - Chemical Insecticide Corp., 53
  - Entomological Society of America, 66
  - Institute of Sanitation Management, 87
  - Michigan State University. Agricultural Experiment Station, 107
  - The National Academy of Sciences—National Research Council. Building Research Advisory Board, 113
  - Ohio State University. Botany and Zoology Library, 144
  - Pineapple Research Institute of Hawaii, 151
  - Tennessee Valley Authority. Technical Library, 177
  - U.S. Department of the Interior.
    - Fish and Wildlife Service.
      - Bureau of Sport Fisheries and Wildlife:
        - Predator and Rodent Control Branch Reference Center, 218
    - National Park Service, 223
  - University of Nevada. Agricultural Experiment Station, 252
- Pesticides
  - Association of American Pesticide Control Officials, Inc., 34
  - Doty Laboratories, 62
  - The National Academy of Sciences—National Research Council. Food Protection Committee, 119
  - National Audubon Society, 129
  - Purdue University. Trace Level Research Institute, 156
  - Scientists' Institute for Public Information, 164
  - Shulton, Inc., 164
  - U.S. Department of the Interior.
    - Fish and Wildlife Service.
      - Bureau of Sport Fisheries and Wildlife:
        - Fish-Pesticides Research Laboratory, 220
        - Patuxent Wildlife Research Center, 218
  - University of Kentucky. Agricultural Experiment Station, 247
- Petrochemicals
  - American Oil Co., 21
  - Atlantic Refining Co. Research and Development Department, 35
  - Ethyl Corp. Ethyl Corp. Research Laboratories, 66
  - Foster D. Snell, Inc., 70
  - Mobil Chemical Co. Edison Township Laboratory, 110
  - National Lead Co. Baroid Division, 133
  - Socony Mobil Oil Co., Inc. Paulsboro Laboratory, 169
  - Universal Oil Products Co. Research Library, 235
- Petrography, *see* Petrology
- Petroleum
  - American Oil Co., 21
  - American Petroleum Institute, 22
  - American Society for Testing and Materials, 26
  - Association of Oil Pipe Lines, 35
  - Atlantic Refining Co.:
    - Research and Development Department, 35
    - Research and Development Department (Southwest Division), 35
- **Petroleum—Continued**
  - Battelle Memorial Institute. Library, 40
  - Engineering Societies Library, 65
  - Ethyl Corp. Ethyl Corp. Research Laboratories, 66
  - Harris Research Laboratories, Inc., 76
  - Humble Oil & Refining Co. Houston Research Library, 81
  - Illinois State Geological Survey, 82
  - Indiana University. Geology Library, 84
  - Kansas State Geological Survey, 84
  - Louisiana State University. Main Library, 98
  - New York Public Library, 138
  - Ohio State University:
    - Charles Cutter Sharp Library of Chemistry, 144
    - Lord Hall Library, 145
  - O'Neill Geothermal, Inc., 147
  - Petrolite Corp. Library and Information Retrieval Center, 150
  - Socony Mobil Oil Co., Inc.:
    - Field Research Laboratory, 169
    - Paulsboro Laboratory, 169
  - Sun Oil Co. Research & Development Library, 176
  - U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195
  - U.S. Department of the Interior.
    - Bureau of Mines:
      - Bartlesville Petroleum Research Center, 209
      - Laramie Petroleum Research Center, 210
      - Morgantown Petroleum Research Laboratory, 211
      - Office of Program Coordination, 211
      - San Francisco Petroleum Research Laboratory, 215
    - Office of Oil and Gas, 225
  - U.S. Department of the Treasury. Bureau of Customs, 225
  - Universal Oil Products Co. Research Library, 235
  - University of Arizona. Arizona Bureau of Mines, 235
  - University of Houston. Libraries, 245
  - The University of Texas:
    - Engineering Library, 264
    - Geology Library, 264
    - Texas Petroleum Research Committee, 265
  - University of Tulsa:
    - Information Services Department, 266
    - Sidney Born Technical Library, 266
  - University of Wyoming. University Library, 269
- Petrology
  - Carnegie Institution of Washington. Geophysical Laboratory, 50
  - Colorado School of Mines Research Foundation, Inc., 56
  - Harvard University. Geological Sciences Library, 77
  - Indiana University. Geology Library, 84
  - Mineralogical Society of America, 109
  - Smithsonian Institution. U.S. National Museum. Museum of Natural History, 167
  - U.S. Department of the Interior.
    - Bureau of Mines:
      - Applied Physics Laboratory, 208
    - Geological Survey, 221
  - University of Michigan.
    - Mineral Museum, 249
    - Subsurface Laboratory and Core Library, 254
  - University of North Carolina. Geology Library, 254

Pharmaceutical Science

- American Bio-Synthetics Corp., 7
- Chas. Pfizer & Co., Inc. Medical Research Laboratories, 53
- Cheminform Institute, 53
- Fine Organics, Inc., 68
- Foster D. Snell, Inc., 70
- Hoffman-La Roche, Inc., 80
- Lilly Research Laboratories, 97
- Miles Laboratories, Inc., 109
- The Norwich Pharmacal Co. Scientific Information Division, 140
- Ohio State University. Pharmacy and Microbiology Library, 146
- Shulton, Inc., 164
- University of Rhode Island. College of Pharmacy, 262
- The Upjohn Co., 269
- Warner-Lambert Pharmaceutical Co. Warner-Lambert Research Institute, 270
- *See also* History of Pharmaceutical Science *and* Toxicology

Pharmacology

- American Institute of Homeopathy, 17
- California College of Medicine, 46
- Columbia University. Medical Library, 57
- Creedmoor Institute for Psychobiologic Studies, 60
- Hazleton Laboratories, Inc., 79
- Institute for Scientific Information, 86
- Library of Congress. Science and Technology Division, 96
- Massachusetts Institute of Technology, Neurosciences Research Information Center, 103
- Mead Johnson & Co., 104
- New Mexico Highlands University. Institute of Scientific Research, 137
- Ohio State University. Pharmacy and Microbiology Library, 146
- Olin Mathieson Chemical Corp. Squibb Institute for Medical Research, 147
- Pharmaceutical Manufacturers Association, 150
- Pharmacology Research, Inc., 150
- Pharmadynamics, 150
- Purdue University. Trace Level Research Institute, 156
- Rutgers—The State University. College of Pharmacy Library, 161
- Schering Corp., 163
- U.S. Department of Agriculture. Agricultural Research Service. Western Utilization and Development Division, 183
- U.S. Department of Defense. Department of the Air Force. School of Aerospace Medicine, 203
- U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227
- The University of Texas:
  - M. D. Anderson Hospital and Tumor Institute, 263
  - Pharmacy Library, 265
- University of Washington. Drug Plant Garden and Laboratories, 267
- Warner-Lambert Pharmaceutical Co. Warner-Lambert Research Institute, 270
- *See also* Narcotics *and* Psychopharmacology

Pharmacopoeias

- American Society of Hospital Pharmacists, 28
- Lilly Research Laboratories, 97

Pharmacy

- American College of Apothecaries, 9
- American Pharmaceutical Association, 22
- American Society of Hospital Pharmacists, 28
- Miles Laboratories, Inc., 109
- New York Academy of Medicine, 137
- Purdue University. University Libraries and Audio-Visual Center, 156
- Rutgers—The State University. College of Pharmacy Library, 161
- Schering Corp., 163
- U.S. Department of Health, Education, and Welfare. Public Health Service. National Library of Medicine, 206
- U.S. Veterans Administration. Medical and General Reference Library, 229
- University of Colorado. Libraries, 242
- University of Florida:
  - Bureau of Professional Relations, 244
  - J. Hillis Miller Health Center Library, 244
- University of Houston. Libraries, 245
- University of Kentucky. University Libraries, 248
- University of Michigan. Science and Engineering Libraries, 250
- University of North Carolina. Division of Health Affairs, 254
- University of Puerto Rico. General Library, 261
- The University of Texas. Pharmacy Library, 265
- University of Washington. University Library, 268
- University of Wyoming. University Library, 269

Phosphors

- Cambridge Communications Corp., 48

Photogrammetry

- U.S. Department of Commerce.
  - Coast and Geodetic Survey:
    - Administrative and Technical Services Division, 188
    - Office of Physical Sciences, 190
- U.S. Department of the Interior. Geological Survey, 221

Photography and Photo Products

- Bell & Howell Co., 42
- E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
- General Aniline & Film Corp.:
  - Central Research Laboratory, 72
  - Research Library, 73
- Minnesota Mining & Manufacturing Co. Graphic Products Library, 109
- Ohio State University. Brown Hall Library, 144
- Polaroid Corp., 151
- Rochester Institute of Technology. Library, 160
- Technicolor Corp., 176
- U.S. Department of Commerce. National Bureau of Standards. Metrology Division, 195
- U.S. Department of Defense. Defense Documentation Center, 202
- University of Michigan. Science and Engineering Libraries, 250
- *See also* Aerial Photography *and* Cinematography

Photointerpretation
  Michigan Technological University. Ford Forestry Center, 107
  Purdue University. Joint Highway Research Project, 155

Physical Chemistry
  American Chemical Society, 8
  American Cyanamid Co., 10
  Armco Steel Corp. Research Center, 33
  Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
  Celanese Corporation of America. Celanese Chemical Co., 52
  Colgate-Palmolive Co., 55
  Duke University. Chemistry Library, 63
  E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
  Ethyl Corp. Chemical Research and Development Library, 66
  Hercules Research Center, 80
  The Institute of Paper Chemistry, 87
  Iowa State University of Science and Technology. Institute for Atomic Research, 90
  The National Academy of Sciences—National Research Council. Office of Critical Tables, 122
  Pennsalt Chemicals Corp., 149
  Princeton University:
    Aeronautical Engineering Library, 153
    Chemistry Library, 153
  Raytheon Co.:
    Research Division Library, 157
    Semiconductor Division Technical Library, 157
  Southern Research Institute, 171
  U.S. Department of the Interior. Bureau of Mines. Minneapolis Metallurgy Research Center, 210
  University of California, Los Angeles. Chemistry Research Library, 239

Physical Metallurgy
  Allegheny Ludlum Steel Corp. Research Center Library, 4
  Armco Steel Corp. Research Center, 33
  Engineering Societies Library, 65
  Manlabs, Inc., 100
  U.S. Department of the Interior.
    Bureau of Mines:
      Albany Metallurgy Research Center, 208
      Rolla Metallurgy Research Center, 214
  See also Metals *and* Properties

Physical Therapy
  American Physical Therapy Association, 23
  National Chiropractic Association, 131
  National Society for Crippled Children and Adults, 135
  University of Pennsylvania. Allied Medical Professions Library, 257

Physics
  Aerojet-General Corp. Technical Library, 1
  American Institute of Physics, 17
  Atlantic Refining Co. Research & Development Department. (Southwest Division), 35
  Avco Corp. Spaceflight Programs Office, 37
  Barnes Engineering Co., 38

Physics—Continued
  Beckman Instruments, Inc., 41
  The Boeing Co.:
    Airplane Division—Wichita Branch, 44
    Boeing Scientific Research Laboratories, 44
  Borg-Warner Corp. Roy C. Ingersoll Research Center, 44
  Brookhaven National Laboratory, 45
  Brooklyn College Library, 45
  Burroughs Corp. Defense and Space Group, 46
  California Institute of Technology. Libraries, 47
  Carnegie Institution of Washington. Department of Terrestrial Magnetism, 50
  Carrier Research & Development Co. Logan Lewis Library, 51
  Case Institute of Technology, 51
  Chemical Rubber Publishing Co., 53
  Columbia University:
    Chemistry Library, 56
    Physics Library, 57
  Cranbrook Institute of Science, 59
  Duke University. Mathematics-Physics Library, 64
  E. I. Du Pont de Nemours & Co., Inc.:
    Technical Library, 64
    Technical Library—Chestnut Run Branch, 64
  Dynatronics, Inc., 65
  Ford Motor Co. Technical Information Section, 69
  Franklin Institute:
    Library, 71
    Science Museum and Planetarium, 71
  General Aniline & Film Corp. Research Library, 73
  Gulf Coast Research Laboratory, 75
  Harvard University:
    Gordon McKay Library of Engineering and Applied Physics, 77
    Physics Research Library, 79
  Humble Oil & Refining Co. Houston Research Library, 81
  Indiana University. Astronomy-Physics-Mathematics Library, 83
  Institute for Scientific Information, 86
  The Institute of Paper Chemistry, 87
  Iowa State University of Science and Technology:
    Institute for Atomic Research, 90
    Library, 90
  The John Crerar Library, 92
  Massachusetts Institute of Technology. Science Library, 103
  Melpar, Inc. Technical Information Center, 105
  Michigan Technological University. Library, 108
  Minnesota Mining & Manufacturing Co. 3M Technical Library, 109
  The National Academy of Sciences—National Research Council. NAS–NRC Library, 122
  National Center for Atmospheric Research:
    High Altitude Observatory Library, 130
    NCAR Library, 130
  National Reactor Testing Station. Technical Library, 134
  New York Academy of Medicine, 137
  New York Academy of Sciences, 137
  New York Public Library, 138
  New York University. New York University Libraries, 138
  Oak Ridge Gaseous Diffusion Plant, 141

Physics—Continued

- Oak Ridge Institute of Nuclear Studies, 141
- Oak Ridge National Laboratory. Oak Ridge National Laboratory Library, 142
- Ohio State University:
  - Cole Memorial Library of Physics, 144
  - Electrical Engineering Library, 144
- Owens-Illinois Glass Co. Technical Center and Research Library, 147
- Philip Morris, Inc., 150
- Philips Laboratories, 150
- Polaroid Corp., 151
- Princeton University:
  - Accelerator Library, 153
  - Aeronautical Engineering Library, 153
  - Engineering Library, 153
  - Mathematics-Physics Library, 153
- Purdue University. University Libraries and Audio-Visual Center, 156
- Raytheon Co.:
  - Bedford Complex Library, 157
  - Communications & Data Processing Operations Library, 157
  - Santa Barbara Operations Library, 157
- Republic Aviation Corp. Engineering Library, 158
- Republic Steel Corp. Research Center Library, 159
- Rutgers—The State University:
  - Central Library, 161
  - College of South Jersey Library, 161
  - Newark Colleges Library, 161
- A. O. Smith Corp., 164
- Smithsonian Institution. Science Information Exchange, 166
- Southern Research Institute, 171
- Stanford Research Institute, 172
- Stanford University:
  - Physics-Mathematics-Statistics Library, 173
  - Stanford Linear Accelerator Center, 173
- Sun Oil Co. Research and Development Library, 176
- U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195
- U.S. Department of Defense.
  - Defense Documentation Center, 202
  - Department of the Air Force:
    - Office of Aerospace Research, 203
  - Department of the Navy:
    - U.S. Naval Observatory, 205
- Universal Oil Products Co. Research Library, 235
- University of California, Berkeley. General Library, 238
- University of California, Los Angeles:
  - Chemistry Research Library, 239
  - Physics Library, 240
- University of Colorado. Libraries, 242
- University of Dayton. University Library, 243
- University of Florida. Engineering and Physics Library, 244
- University of Houston. Libraries, 245
- University of Illinois. Physics Library, 246
- University of Kentucky University Libraries, 248
- University of Michigan. Science and Engineering Libraries, 250
- University of Nevada. Library, 252

Physics—Continued

- University of New Hampshire. Engineering Experiment Station, 253
- University of North Carolina. Mathematics-Physics Library, 254
- University of Notre Dame. Chemistry-Physics Library, 255
- University of Oklahoma. Physics Library, 257
- University of Pennsylvania. Mathematics-Physics Library, 259
- University of Puerto Rico. General Library, 261
- University of Southern Mississippi. Library 263
- The University of Texas:
  - Physics Library, 265
  - Military Physics Research Laboratory, 265
- University of Washington:
  - Applied Physics Laboratory, 267
  - University Library, 268
- Western Reserve University. Freiberger Library, 272
- Westinghouse Electric Corp. Westinghouse Atomic Power Division, 272
- West Virginia University. Mathematics-Physics Research Library, 273
- *See also* Acoustics, Biophysics, Cryogenics, Dielectrics, Electrostatics, Energy Conversion, Fluid Mechanics, Heat Transfer, High-Temperature Research, Lasers, Masers, Mossbauer Effect, Nuclear Science and Technology, Plasma Physics, Solar Physics, *and* Superconductors

Physiology

- California College of Medicine, 46
- Cedars of Lebanon Hospital, 51
- Columbia University. Biological Sciences Library, 56
- Duke University. Biology—Forestry Library, 63
- Entomological Society of America, 66
- Gulf Coast Research Laboratory, 75
- Harvard University. Biology Laboratories, 76
- Highlands Biological Station, Inc., 80
- Indiana University. Antomy-Physiology Library, 83
- Institute for Muscle Disease, Inc., 86
- Library of Congress. Science and Technology Division, 96
- Mount Desert Island Biological Laboratory, 110
- Pharmacology Research, Inc., 150
- The Population Council, 151
- Princeton University. Biology and Geology Library, 153
- Rutgers—The State University. Newark Colleges Library, 161
- University of Illinois. Biology Library, 245
- University of North Carolina. Zoology Library, 254
- University of Notre Dame. Biology Library, 255
- University of Pennsylvania:
  - George S. Cox Medical Research Institute, 258
  - Johnson Research Foundation, 258
- The University of Texas. Biology Library, 263

Pigments

- American Zinc Institute, Inc., 30
- Dry Color Manufacturers Association, 63
- E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
- Metal Powders Industries Federation—American Powder Metallurgy Institute, 105

Pigments—Continued
- National Gallery of Art. Research Laboratory, 132
- National Lead Co. Titanium Division, 133
- National Paint, Varnish and Lacquer Association, 134
- Standard Ultramarine & Color Co., 171
- U.S. Department of the Treasury. Bureau of Engraving and Printing, 226
- University of Pennsylvania. Biology Library, 257

Pipelines
- American Petroleum Institute, 22
- American Society of Civil Engineers, 28
- Association of Oil Pipe Lines, 35
- Bureau of Railway Economics, 46

Planetariums
- American Association of Museums, 6

Plant Nutrition
- American Farm Research Association, 12
- American Society of Agronomy, 27
- National Plant Food Institute, 134
- Pineapple Research Institute of Hawaii, 151
- Potato Association of America, 152
- Purdue University. Trace Level Research Institute, 156

Plant Pathology
- American Association of Nurserymen, Inc., 6
- American Society of Sugar Beet Technologists, 29
- Illinois Natural History Survey, 82
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- Louisiana State University:
  - Louisiana Agricultural Experiment Station, 98
  - Main Library, 98
- Michigan State University. Agricultural Experiment Station, 107
- Ohio State University. Botany and Zoology Library, 144
- Pickle Packers International, Inc., 151
- Pineapple Research Institute of Hawaii, 151
- Potato Association of America, 152
- Purdue University. Agricultural Information Department, 154
- Texas A & M University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture. Cooperative State Research Service, 184
- University of Florida. Agricultural Experiment Stations, 243
- University of Illinois. Illinois Agricultural Experiment Station, 246
- University of Kentucky. Agricultural Experiment Station, 247
- University of Maine. Maine Agricultural Experiment Station, 248
- University of Nevada. Agricultural Experiment Station, 252
- University of North Carolina:
  - Agricultural Experiment Station, 253
  - Botany Library, 253
- University of Rhode Island. Agricultural Experiment Station, 262

Plant Pathology—Continued
- University of Wyoming. Agricultural Experiment Station, 268
- West Virginia University. West Virginia Agricultural Experiment Station, 274

Plant Physiology
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- Ohio State University. Botany and Zoology Library, 144
- Texas A & M University. Texas Agricultural Experiment Station, 178
- University of North Carolina. Botany Library, 253
- University of Pennsylvania. Biology Library, 257
- University of Rhode Island. Agricultural Experiment Station, 262

Plasma Physics
- Aerojet-General Corp. Aerojet-General Nucleonics, 1
- American Institute of Physics, 17
- Avco Corp. Avco-Everett Research Laboratory, 36
- The Boeing Co.:
  - Aero-Space Division, 43
  - Boeing Scientific Research Laboratories, 44
- Massachusetts Institute of Technology. Fluid Mechanics Laboratory, 102
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- Philips Laboratories, 150
- Princeton University. Plasma Physics Laboratory Library, 153
- TRW Space Technology Laboratories, 179
- United Aircraft Corp. Research Library, 179
- U.S. Department of Commerce. National Bureau of Standards. Upper Atmosphere and Space Physics Division, 198

Plastics
- Adhesive Products Corp., 1
- American Bio-Synthetics Corp., 7
- American Cyanamid Co., 10
- American Society for Testing and Materials, 26
- Belfour Engineering Co. Mechanical Properties Data Center, 41
- Celanese Corporation of America:
  - Celanese Polymer Co., 52
  - Summit Research Laboratories, 52
- Cheminform Institute, 53
- E. I. Du Pont de Nemours & Co., Inc. Technical Library, 64
- Fine Organics, Inc., 68
- Foster D. Snell, Inc., 70
- Franklin Institute. Laboratories for Research and Development, 70
- Harris Research Laboratories, Inc., 76
- Hercules Research Center, 80
- Information for Industry, Inc., 85
- The Institute of Paper Chemistry, 87
- Karl M. Fox Consulting Research Service and Library, 93
- Metcut Research Machining Information Center, 105
- The National Academy of Sciences—National Research Council. Conference on Electrical Insulation, 118
- New York Public Library, 138

Plastics—Continued
- Owens-Corning Fiberglas Corp., 147
- Owens Illinois Glass Co. Technical Center and Research Library, 147
- Pennsalt Chemicals Corp., 149
- Pneumodynamics Corp. Cleveland Pneumatic Division, 151
- Princeton University. Engineering Library, 153
- Raytheon Co. Lowell Library, 157
- A. O. Smith Corp., 164
- Society for Nondestructive Testing, 168
- The Society of the Plastics Industry, Inc., 168
- U.S. Department of Defense.
  - Department of the Air Force:
    - Air Force Materials Laboratory (MAAM), 203
  - Department of the Army:
    - Plastics Technical Evaluation Center, 204
- University of Dayton. Research Institute, 242
- Winzen Research, Inc., 274

Platinum Metals
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Engelhard Industries, Inc., 65
- International Nickel Co., Inc., 89

Plywood, *see* Wood

Podiatry
- Dr. Charles E. Krausz, 52

Polarized Light
- Polaroid Corp., 151

Polar Research
- Arctic Institute of North America. Arctic Bibliography Project, 32
- Library of Congress. Science and Technology Division, 96
- The National Academy of Sciences—National Research Council. Committee on Polar Research, 115
- National Science Foundation. Office of Antarctic Programs, 135
- Ohio State University:
  - Institute of Polar Studies, 145
  - Orton Memorial Library of Geology, 146
- Science Communication, Inc., 163
- U.S. Department of the Treasury. U.S. Coast Guard. Office of Operations, 227
- University of Alaska. Alaska Agricultural Experiment Station, 235
- University of Colorado. Institute of Arctic and Alpine Research, 241
- *See also* Permafrost

Pollen, *see* Palynology

Pollution, *see* Air Pollution *and* Water Pollution

Polymers
- Allied Chemical Corp. Central Research Laboratory, 4
- American Bio-Synthetics Corp., 7
- American Cyanamid Co., 10
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Borg-Warner Corp. Roy C. Ingersoll Research Center, 44

Polymers—Continued
- Celanese Corporation of America:
  - Celanese Polymer Co., 52
  - Summit Research Laboratories, 52
- Duke University. Chemistry Library, 63
- E. I. Du Pont de Nemours & Co., Inc.:
  - Technical Library, 64
  - Technical Library—Chestnut Run Branch, 64
- Fiber Society, Inc., 68
- Foster D. Snell, Inc., 70
- General Mills, Inc. Central Research Libraries, 73
- Harris Research Laboratories, Inc., 76
- Massachusetts Institute of Technology. Materials Research Laboratory, 103
- Mellon Institute, 105
- Minnesota Mining & Manufacturing Co. Abrasives Library, 109
- Mobil Chemical Co. Edison Township Laboratory, 110
- National Gallery of Art. Research Laboratory, 132
- Stanford University. Swain Library of Chemistry, 173
- Textile Research Institute, 178
- U.S. Department of Commerce. National Bureau of Standards. Polymers Division, 197
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Colorado. Engineering Research Center, 241
- University of Dayton. Research Institute, 242
- Wyandotte Chemical Corp. Research Library and Technical Information Center, 275

Porcelain Enamel
- American Ceramic Society, Inc., 8
- American Society for Testing and Materials, 26

Portland Cement, *see* Cement

Poultry Science
- Georgia Institute of Technology. Technical Information Section, 74
- Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Michigan State University. Agricultural Experiment Station, 107
- Ohio Agricultural Experiment Station, 143
- Purdue University. Agricultural Information Department, 154
- Texas A & M University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture.
  - Agricultural Research Service:
    - Western Utilization Research and Development Division, 183
  - Cooperative State Research Service, 184
- University of Florida. Agricultural Experiment Stations, 243
- University of Kentucky. Agricultural Experiment Station, 247
- University of North Carolina. Agricultural Experiment Station, 253

Poultry Science—Continued
- University of Rhode Island. Agricultural Experiment Station, 262
- University of Wyoming. Agricultural Experiment Station, 268
- West Virginia University. West Virginia Agricultural Experiment Station, 274

Powder Metallurgy
- Allegheny Ludlum Steel Corp. Research Center Library, 4
- American Ceramic Society, Inc., 8
- Carborundum Co., 49
- Metal Powder Industries Federation—American Powder Metallurgy Institute, 105
- Mueller Brass Co., 110
- National Research Corp., 134
- University of Dayton. Research Institute, 242

Printing, *see* Graphic Arts

Printing Inks
- National Paint, Varnish, and Lacquer Association, 134
- Standard Ultramarine & Color Co., 171
- U.S. Department of the Treasury. Bureau of Engraving and Printing, 226

Progeria
- Creedmoor Institute for Psychobiologic Studies, 60

Propellants and Propulsion
- Aerojet-General Corp.:
  - Corporate Technical Information Center, 1
  - Technical Library, 1
- American Astronautical Society, 7
- Avco Corp.:
  - Avco-Everett Research Laboratory, 36
  - Lycoming Division, 37
  - Ordnance Division, 37
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Bell Helicopter Co., 42
- The Boeing Co.:
  - Aero-Space Division, 43
  - Boeing Scientific Research Laboratories, 44
- Fluidyne Engineering Corp., 69
- Franklin Institute. Laboratories for Research and Development, 70
- Illinois Institute of Technology. IIT Research Institute, 81
- Ion Physics Corp., 89
- Johns Hopkins University. Chemical Propulsion Information Agency, 92
- Massachusetts Institute of Technology:
  - Aeronautics and Astronautics Library, 101
  - Fuels Research Laboratory, 102
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- Purdue University. Jet Propulsion Center, 155
- United Aircraft Corp. Research Library, 179
- United Nuclear Corp., 180
- U.S. Department of Defense. Defense Documentation Center, 202
- *See also* Fuels

Properties
- Allegheny Ludlum Steel Corp. Research Center Library, 4
- American Association of Textile Chemists and Colorists, 6
- Belfour Engineering Co. Mechanical Properties Data Center, 41
- Bethlehem Steel Co. Homer Research Laboratories, 42
- Copper Development Association, Inc., 59
- Expanded Shale, Clay, and Slate Institute, 67
- Franklin Institute. Laboratories for Research and Development, 70
- Hughes Aircraft Co. Electronic Properties Information Center, 80
- International Nickel Co., Inc., 89
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- Johns Hopkins University. Chemical Propulsion Information Agency, 92
- Melpar, Inc. Technical Information Center, 105
- Midwest Research Institute. Thermophysical Properties of Thermal Insulating Materials, 109
- The National Academy of Sciences—National Research Council. Office of Critical Tables, 122
- New Mexico Highlands University. Institute of Scientific Research, 137
- Purdue University:
  - Literature Retrieval System for Inorganic Compounds, 155
  - Thermophysical Properties Research Center, 155
- Reynolds Metal Co. Technical Information Center, 159
- Stein Engineering Services, Inc., 174
- Texas A & M University. Chemical Thermodynamic Properties Center, 177
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Cryogenic Data Center, 193
    - Inorganic Materials Division, 194
    - Mechanics Division, 195
    - Metallurgy Division, 195
    - Metrology Division, 195
    - Office of Standard Reference Data, 196
    - Polymers Division, 197
- U.S. Department of Defense. Department of the Air Force. Air Force Materials Laboratory (MAAM), 203
- U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209
- University of Colorado. Engineering Research Center, 241
- The University of Texas. Structural Mechanics Research Laboratory, 265
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Prosthetics
- American Academy of Implant Dentures, 5
- American Foundation for the Blind, Inc., 13
- American Orthotics and Prosthetics Association, 21
- The National Academy of Sciences—National Research Council. Committee on Prosthetic-Orthotic Education, 115
- U.S. Veterans Administration. Prosthetic and Sensory Aids Service, 234
- *See also* Orthotics

Proteins
  American Bio-Synthetics Corp., 7
  Colgate-Palmolive Co., 55
  Institute for Muscle Disease, Inc., 86
  Marine Chemurgics, Inc., 100
  Virginia Institute for Scientific Research, 269

Psychiatry
  American Mental Health Foundation, Inc., 18
  American Psychiatric Association, 24
  Cedars of Lebanon Hospital, 51
  College of Physicians of Philadelphia, 55
  Columbia University. Medical Library, 57
  Denver Medical Society, 61
  Massachusetts Institute of Technology. Neurosciences Research Information Center, 103
  Rutgers—The State University. Center of Alcohol Studies, 160
  U.S. Veterans Administration. Medical and General Reference Library, 229
  University of California, Los Angeles. Neuropsychiatric Institute, 239
  University of Florida. J. Hillis Miller Health Center Library, 244
  See also History of Psychiatry *and* Mental Health

Psychoacoustics
  American Speech and Hearing Association, 29
  Bolt, Beranek, & Newman, Inc., 44
  Massachusetts Institute of Technology. Neurosciences Research Information Center, 103
  Southern Methodist University. Acoustics Laboratory, 171

Psychobiology
  Creedmoor Institute for Psychobiologic Studies, 60

Psychopharmacology
  Massachusetts Institute of Technology. Neurosciences Research Information Center, 103
  Mead Johnson & Co., 104
  New Mexico Highlands University. Institute of Scientific Research, 137

Public Health
  American Association of Hospital Consultants, 6
  American Society of Sanitary Engineering, 29
  Charitable, Educational and Scientific Foundation, 52
  Kentucky State Health Department, 93
  Public Health Federation of the Cincinnati Area, 154
  State Medical Society of Wisconsin, 174
  Texas Medical Center Library, 178
  U.S. Department of Health, Education, and Welfare. Public Health Science, 206
  University of California, Berkeley. General Library, 238
  University of California, Los Angeles. Biomedical Library, 239
  University of Florida. Florida Engineering and Industrial Experiment Station, 244
  University of Michigan. Public Health Library, 250
  University of North Carolina. Division of Health Affairs, 254

Public Health—Continued
  University of Pittsburgh:
    Graduate School of Public Health Library, 261
    Health Law Center, 261

Pyrometallurgy, *see* Extractive Metallurgy

Quality Control
  American Society for Quality Control, 26
  See also Standards *and* Testing

Radar
  Avco Corp.:
    Electronics Division, 37
    Ordnance Division, 37
  The Boeing Co. Airplane Division—Wichita Branch, 44
  Franklin Institute. Laboratories for Research and Development, 71
  Magnavox Co., 99
  Massachusetts Institute of Technology:
    Lincoln Laboratory, 103
    Weather Radar Research Project, 104
  Raytheon Co.:
    Submarine Signal Operations Library, 158
    Wayland Library, 158
  The University of Texas. Defense Research Laboratory, 264

Radiation
  Air Pollution Control Association, 3
  American Astronautical Society, 7
  American Industrial Hygiene Association, 16
  American Meteorological Society, 19
  American Nuclear Society, 20
  Atomic Industrial Forum, Inc., 35
  Brookhaven National Laboratory, 45
  High Voltage Engineering Corp., 80
  Mellon Institute, 105
  The National Academy of Sciences—National Research Council:
    U.S. National Committee for International Years of the Quiet Sun, 125
    World Data Center A, 126
  Oak Ridge National Laboratory:
    Internal Dose Information Center, 142
    Radiation Shielding Information Center, 142
  Princeton University. Accelerator Library, 153
  Scientists' Institute for Public Information, 164
  Smithsonian Institution. Astrophysical Observatory, 165
  U.S. Atomic Energy Commission. Radiological Physics and Instrumentation Center, 181
  U.S. Department of Commerce. National Bureau of Standards. Upper Atmosphere and Space Physics Division, 198
  U.S. Department of the Interior. Bureau of Mines. Albany Metallurgy Research Center, 208
  University of California. Lawrence Radiation Laboratory, 237
  University of Michigan. Michigan Memorial-Phoenix Project, 249
  University of Notre Dame. Lobund Laboratory, 255

Radiation—Continued
  University of Washington:
    Laboratory of Radiation Biology, 267
    Nuclear Reactor Laboratories, 268
  Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Radiation Effects
  American Cancer Society, Inc., 8
  Battelle Memorial Institute. Radiation Effects Information Center, 40
  Franklin Institute. Laboratories for Research and Development, 70
  Hazleton Laboratories, Inc., 79
  High Voltage Engineering Corp., 80
  Isotopes, Inc., 91
  The National Academy of Sciences—National Research Council:
    Advisory Committee on Atomic Bomb Casualty Commission, 112
    Advisory Committee to the Radiation Registry of Physicians, 112
  National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
  Smithsonian Institution. Astrophysical Observatory, 165
  U.S. Department of Defense. Department of the Air Force. School of Aerospace Medicine, 203
  University of Colordao. Joint Institute for Laboratory Astrophysics, 241
  University of Illinois. Physics Library, 246
  University of Notre Dame. Lobund Laboratory, 255
  University of Washington. Laboratory of Radiation Biology, 267

Radio Astronomy, *see* Astronomy

Radiobiology, *see* Radiation Effects

Radiochemistry
  Chas. Pfizer & Co., Inc., Medical Research Laboratories, 53
  Foster D. Snell, Inc., 70
  High-Voltage Engineering Corp., 80
  Indiana University. Chemistry Library, 84
  Iowa State University of Science and Technology. Institute for Atomic Research, 90
  Isotopes, Inc., 91
  Southern Research Institute, 171
  Stanford University. Swain Library of Chemistry, 173
  U.S. Department of Commerce. National Bureau of Standards. Analytical Chemistry Division, 192

Radio Engineering
  All-Tronics, Inc., 5
  Magnavox Co., 99
  Massachusetts Institute of Technology. Lincoln Laboratory, 103
  The National Academy of Sciences—National Research Council. Committee on Radio Frequency Requirements for Scientific Research, 116
  New York Public Library, 138
  Pickard and Burns, Inc., 150
  Stanford University. Stanford Electronic Laboratories, 173

Radio Engineering—Continued
  U.S. Department of Commerce.
    National Bureau of Standards:
      Boulder Laboratories Library, 193
      NBS Library, 195
      Radio Standards Laboratory, 197
      Radio Systems Division, 198
  The University of Texas. Defense Research Laboratory, 264
  See also Antennas, Radar, Radio Propagation, *and* Microwaves

Radioisotopes
  American Nuclear Society, 20
  Atomic Industrial Forum, Inc., 35
  Carnegie Institution of Washington:
    Department of Terrestrial Magnetism, 50
    Geophysical Laboratory, 50
  Columbia University. Chemistry Library, 56
  Georgia Institute of Technology. Technical Information Section, 74
  High Voltage Engineering Corp., 80
  Isotopes, Inc., 91
  Library of Congress. Science and Technology Division, 96
  Massachusetts Institute of Technology. Department of Geology and Geophysics, 102
  Oak Ridge Gaseous Diffusion Plant, 141
  Troxler Electronic Laboratories, Inc., 179
  U.S. Department of the Interior.
    Bureau of Mines:
      Albany Metallurgy Research Center, 208
    Bureau of Reclamation, 215
  University of Washington. Laboratory of Radiation Biology, 267

Radiological Warfare
  U.S. Department of Defense. Defense Documentation Center, 202

Radiology
  American Dental Association, 10
  Carnegie Institution of Washington. Department of Embryology, 49
  College of Physicians of Philadelphia, 55
  Columbia University. Medical Library, 57
  Federal Aviation Agency. Aeronautical Center Library Service, 67
  The National Academy of Sciences—National Research Council. Advisory Committee to the Radiation Registry of Physicians, 112
  Oak Ridge National Laboratory. Internal Dose Information Center, 142
  Straub Clinic, 175
  U.S. Department of Health, Education, and Welfare. Public Health Service, 206
  University of Michigan. Science and Engineering Libraries, 250
  The University of Texas. M. D. Anderson Hospital and Tumor Institute

Radio Propagation
- Ohio State University. Antenna Laboratory Library, 143
- Pickard and Burns, Inc., 150
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Boulder Laboratories Library, 193
    - Ionosphere Research and Propagation Division, 195
    - Troposphere and Telecommunications Division, 198

Railroads
- Bureau of Railway Economics, 46
- Midwest Inter-Library Center, 108
- New York Public Library, 138

Range Management
- Society of American Foresters, 168
- Texas A & M University. Texas Agricultural Experiment Station, 178
- U.S. Department of Agriculture. Soil Conservation Service, 187
- U.S. Department of the Interior. Bureau of Land Management, 207
- University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
- University of Wyoming:
  - Agricultural Experiment Station, 268
  - Jackson Hole Biological Research Station, 268

Rare Earths
- Iowa State University of Science and Technology. Institute for Atomic Research, 90
- National Lead Co. Titanium Alloy Manufacturing Division, 133
- U.S. Department of the Interior. Bureau of Mines. Albany Metallurgy Research Center, 208

Recovery Systems, *see* Aerial Recovery

Reentry, *see* Aerospace Sciences

Refractories
- American Ceramic Society, Inc., 8
- American Society for Testing and Materials, 26
- Bethlehem Steel Co. Homer Research Laboratories, 42
- Carborundum Co., 49
- National Lead Co. Titanium Alloy Manufacturing Division, 133
- Oak Ridge National Laboratory. Research Materials Information Center, 142
- U.S. Department of Commerce. National Bureau of Standards. Inorganic Materials Division, 194
- U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209
- *See also* Ceramics

Refractory Metals
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Crucible Steel Co. of America, 60
- National Lead Co. Titanium Alloy Manufacturing Division, 133
- National Research Corp., 134
- Nuclear Metals, Inc., 140

Refractory Metals—Continued
- U.S. Department of the Interior.
  - Bureau of Mines:
    - College Park Metallurgy Research Center, 209
    - Norris Metallurgy Research Laboratory, 211
    - Rolla Metallurgy Research Center, 214

Refrigeration
- Air-Conditioning and Refrigeration Institute, 3
- Carrier Research & Development Co. Logan Lewis Library, 51
- Mueller Brass Co., 110
- U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193

Rehabilitation
- American Foundation for the Blind, Inc., 13
- American Heart Association, 15
- California College of Medicine, 46
- Columbia University. Medical Library, 57
- Forest Park Foundation, 69
- Gallaudet College. Edward Miner Gallaudet Memorial Library, 72
- Public Health Federation of the Cincinnati Area, 154
- U.S. Veterans Administration:
  - Central Office Film Library, 229
  - Medical and General Reference Library, 229
- University of California, Los Angeles. Neuropsychiatric Institute, 239
- University of Pennsylvania. Allied Medical Professions Library, 257

Reptiles, *see* Herpetology

Resins
- American Bio-Synthetics Corp., 7
- American Cyanamid Co., 10
- Archer-Daniels-Midland Co. T. L. Daniels Research Center, 32
- General Mills, Inc. Central Research Libraries, 73
- Information For Industry, Inc., 85
- National Gallery of Art. Research Laboratory, 132
- National Paint, Varnish and Lacquer Association, 134
- Nopco Chemical Co., 139
- Textron, Inc., 178

Rhenium
- Battelle Memorial Institute. Defense Metals Information Center, 39

Rhodium, *see* Platinum Metals

Rice
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- University of Florida. Agricultural Experiment Stations, 243

Roentgenology, *see* Radiology

Rubber
- American Chemical Society, 8
- American Society for Testing and Materials, 26
- Foster D. Snell, Inc., 70
- Harris Research Laboratories, Inc., 76
- Information For Industry, Inc., 85
- Karl M. Fox Consulting Research Service and Library, 93

Rubber—Continued
  New York Public Library, 138
  Pennsalt Chemicals Corp., 149
  U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195

Rum, *see* Distilled Spirits

Rural Electrification
  Edison Electric Institute, 65
  U.S. Department of Agriculture. Rural Electrification Administration, 187

Safety Engineering
  American Iron and Steel Institute, 18
  American Petroleum Institute, 22
  American Welding Society, 30
  Associated General Contractors of America, 33
  Atomic Industrial Forum, Inc., 35
  Harvard University. Gordon McKay Library of Engineering and Applied Sciences, 77
  Johns Hopkins University. Chemical Propulsion Information Agency, 92
  National Constructors Association, 135
  Oak Ridge National Laboratory. Nuclear Safety Information Center, 142
  Ohio State University. Davis Welding Library, 144
  U.S. Department of Health, Education, and Welfare. Public Health Service. Inquiries Branch, Office of Information and Publications, 206
  U.S. Department of the Interior.
    Bureau of Mines:
      Office of the Assistant Director, Health and Safety, 211
    Library, 223
  University of Florida. Florida Engineering and Industrial Experiment Station, 244
  See also Aviation Safety Engineering

Saline Water, *see* Water Treatment

Sanitary Engineering
  Air Pollution Control Association, 3
  American Society of Civil Engineers, 28
  American Society of Sanitary Engineering, 29
  Bay Area Air Pollution Control District, 41
  Dairy and Food Industries Supply Association, 60
  Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
  Institute of Sanitation Management, 87
  Kentucky State Health Department, 93
  The National Academy of Sciences—National Research Council. Committee on Sanitary Engineering and Environment, 116
  Ohio State University. Aeronautical-Civil Engineering Library, 143
  Rutgers—The State University. New Jersey College of Agriculture Library, 161
  U.S. Department of Health, Education, and Welfare. Public Health Service. Inquiries Branch, Office of Information and Publications, 206
  University of Rhode Island. Division of Engineering Research and Development, 262

Sanitary Engineering—Continued
  See also Air Pollution, Industrial Hygiene, Waste Disposal, *and* Water Pollution

Satellites
  Avco Corp. Technical Communications Department, 37
  The National Academy of Sciences—National Research Council:
      Space Science Board, 125
      World Data Center A for Rockets and Satellites, 126
  National Aeronautics and Space Administration, 127
  Smithsonian Institution. Astrophysical Observatory, 165
  See also Missiles and Rockets

Science and Technology
  American Council of Independent Laboratories, Inc., 10
  American Science Information Institute, 25
  American Standards Association, 30
  Carnegie Library of Pittsburgh, 50
  Engineering Societies Library, 65
  Industrial Research Institute, Inc., 84
  The John Crerar Library, 92
  Library of Congress:
    National Referral Center for Science and Technology, 96
    Science and Technology Division, 96
  Midwest Inter-Library Center, 108
  Midwest Research Institute. ASTRA, 108
  National Federation of Science Abstracting and Indexing Services, 132
  Rensselaer Polytechnic Institute, 158
  The Science Bureau of the Metropolitan Board of Trade, 163
  Smithsonian Institution. Science Information Exchange, 166
  Technical Advisory Service for Lawyers, 176
  U.S. Department of Commerce. National Bureau of Standards. Office of Technical Services, 196
  U.S. Department of Defense. Defense Documentation Center, 202
  University of Maine. Raymond H. Fogler Library, 248
  University of Pennsylvania. Charles Patterson Van Pelt Library, 257
  University of Washington. Pacific Northwest Bibliographic Center, 268
  Wayne State University. Center for Applications of Science and Technology, 270

Scientific Organizations
  Library of Congress. International Organizations Section, 95
  The National Academy of Sciences—National Research Council. Office of the Foreign Secretary, 123

Scientific Personnel
  American Mathematical Society, 18
  National Science Foundation. Office of Economic and Manpower Studies, 135

Sedimentation
  Delaware Geological Survey, 61
  Harvard University. Museum of Comparative Zoology, 78
  Massachusetts Institute of Technology. Hydrodynamics Laboratory, 102
  Paleontological Research Institute, 148

Sedimentation—Continued
  U.S. Department of Agriculture. Soil Conservation Service, 187
  U.S. Department of the Interior:
    Bureau of Reclamation, 215
    Geological Survey, 221

Seeds
  American Farm Research Association, 12
  American Society of Agronomy, 27
  University of North Carolina. Geology Library, 254
  University of Washington Drug Plant Garden and Laboratories, 267
  Viccars Seed Laboratory, 269

Seismology
  Carnegie Institution of Washington. Department of Terrestrial Magnetism, 50
  Harvard University. Geological Science Library, 77
  Massachusetts Institute of Technology. Department of Geology and Geophysics, 102
  Melpar, Inc., 105
  The National Academy of Sciences—National Research Council. World Data Center A, 126
  Southern Methodist University. Dallas Seismological Observatory, 171
  Structural Engineers Association of California, 175
  U.S. Department of Commerce. Coast and Geodetic Survey. Office of Physical Sciences, 190
  U.S. Department of the Interior. Geological Survey, 221
  University of Michigan:
    Ann Arbor Seismograph Station, 248
    Vela Seismic Information Analysis Center, 251
  University of Nevada. Desert Research Institute, 252
  The University of Texas. Geology Library, 264

Selenium
  Battelle Memorial Institute, 38

Semiconductors
  Battelle Memorial Institute. Electronic Component Reliability Center, 39
  Bell & Howell Co., 42
  The Boeing Co. Aero-Space Division, 43
  Cambridge Communications Corp., 48
  Carrier Research & Development Co. Logan Lewis Library, 51
  Derivation & Tabulation Associates, Inc., 61
  Georgia Institute of Technology. Technical Information Section, 74
  Hughes Aircraft Co. Electronic Properties Information Center, 80
  Iowa State University of Science and Technology. Institute for Atomic Research, 90
  Manlabs, Inc., 100
  The National Academy of Sciences—National Research Council. Conference on Electrical Insulation, 118
  Oak Ridge National Laboratory. Research Materials Information Center, 142
  Raytheon Co. Semiconductor Division Technical Library, 157
  Texas Instruments, Inc. Corporate Technical Information Center, 178

Semiconductors—Continued
  U.S. Department of Commerce. National Bureau of Standards. Electron Devices Data Service, 193
  University of Illinois. Physics Library, 246
  Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Sensory Aids
  American Foundation for the Blind, Inc., 13
  U.S. Veterans Administration. Prosthetic and Sensory Aids Service, 234
  See also Hearing Aids

Shale
  Expanded Shale, Clay, and Slate Institute, 67

Shipbuilding, *see* Marine Engineering

Shore Preservation, *see* Coastal Engineering

Silicates, *see* Ceramics

Silicones
  Dow Corning Center for Aid to Medical Research, 63

Silver
  American Bureau of Metal Statistics, 7
  Engelhard Industries, Inc., 65
  U.S. Department of the Treasury. Bureau of the Mint, 226

Silviculture, *see* Forestry

Slag
  National Slag Association, 135

Slate
  Expanded Shale, Clay, and Slate Institute, 67

Soap, *see* Cleaning Compounds

Soil Conservation
  Soil Conservation Society of America, 169
  U.S. Department of Agriculture. Soil Conservation Service, 187
  U.S. Department of the Interior. Bureau of Reclamation, 215

Soil Science
  American Farm Research Association, 12
  American Forestry Association, 12
  American Society for Testing and Materials, 26
  American Society of Agronomy, 27
  American Society of Civil Engineers, 28
  California Fertilizer Association, 47
  Columbia University. Geology Library and University Map Room, 57
  Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
  Massachusetts Institute of Technology:
    Department of Civil Engineering, 101
    Soil Mechanics Library, 104
  Michigan State University. Agricultural Experiment Station, 107
  Michigan Technological University. Ford Forestry Center, 107
  The National Academy of Sciences—National Research Council. Building Research Advisory Board, 113

Soil Science—Continued
National Canners Association, 130
National Plant Food Institute, 134
Ohio State University. Natural Resources Institute, 145
Pineapple Research Institute of Hawaii, 151
Potato Association of America, 152
Princeton University. River and Harbor Library, 154
Purdue University:
Agricultural Information Department, 154
Joint Highway Research Project, 155
Rutgers—The State University. New Jersey College of Agriculture Library, 161
Sulphur Institute, 175
Tennessee Valley Authority. Technical Library, 177
Texas A & M University. Texas Agricultural Experiment Station, 178
U.S. Department of Agriculture:
Cooperative State Research Service, 184
National Agricultural Library, 185
Soil Conservation Service, 187
U.S. Department of the Interior.
Bureau of Mines:
Grand Forks Lignite Research Laboratory, 210
Bureau of Reclamation, 215
University of California. Institute of Transportation and Traffic Engineering, 237
University of Colorado. Engineering Research Center, 241
University of Florida:
Agricultural Experiment Stations, 243
Florida Engineering and Industrial Experiment Station, 244
University of Illinois:
Agriculture Library, 245
Illinois Agricultural Experiment Station, 246
University of Kentucky. Agricultural Experiment Station, 247
University of Maine. Maine Agricultural Experiment Station, 248
University of Nevada. Agricultural Experiment Station, 252
University of New Hampshire. Agricultural Experiment Station, 253
University of North Carolina. Agricultural Experiment Station, 253
University of Puerto Rico. Puerto Rico Agricultural Experiment Station, 262
University of Rhode Island. Division of Engineering Research and Development, 262
University of Wyoming. Agricultural Experiment Station, 268
West Virginia University. West Virginia Agricultural Experiment Station, 274

Solar Energy
Solar Energy Society. Technical Research Science Center, 170
University of Arizona. Institute of Atmospheric Physics, 236
University of Pennsylvania. Power Information Center, 259

Solar Physics
American Astronautical Society, 7
American Meteorological Society, 19
Carnegie Institution of Washington. Mount Wilson and Palomar Observatories, 50
The National Academy of Sciences—National Research Council:
U.S. National Committee for International Years of the Quiet Sun, 125
World Data Center A, 126
National Center for Atmospheric Research:
High Altitude Observatory Library, 130
World Data Center A: Solar Activity, 130
U.S. Department of Commerce. National Bureau of Standards. Upper Atmosphere and Space Physics Division, 198

Solid Fuels, *see* Fuels

Solid Propellants, *see* Propellants and Propulsion

Solid State Sciences
American Ceramic Society, Inc., 8
American Society for Metals, 25
Bell & Howell Co., 42
The Boeing Co. Boeing Scientific Research Laboratories, 44
Cambridge Communications Corp., 48
Carborundum Co., 49
Franklin Institute. Laboratories for Research and Development, 70
High Voltage Engineering Corp., 80
Ion Physics Corp., 89
Litton Systems, Inc. Applied Science Division Library, 97
Massachusetts Institute of Technology:
Engineering Library, 102
Lincoln Laboratory, 103
Neurosciences Research Information Center, 103
Oak Ridge National Laboratory. Research Materials Information Center, 142
Ohio State University. Cole Memorial Library of Physics, 144
Philips Laboratories, 150
Princeton University. Engineering Library, 153
Raytheon Co. Semiconductor Division Technical Library, 157
Southern Research Institute, 171
Stanford University. Stanford Electronic Laboratories, 173
Texas Instruments, Inc. Corporate Technical Information Center, 178
United Aircraft Corp. Research Library, 179
U.S. Department of Commerce. National Bureau of Standards. Mechanics Division, 195
University of Illinois. Physics Library, 246
University of Michigan. Infrared Information and Analysis Center, 249
University of Nevada. Desert Research Institute, 252
University of North Carolina. Mathematics-Physics Library, 254
Virginia Institute for Scientific Research, 269
Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Solvents
- American Society for Testing and Materials, 26
- Cheminform Institute, 53
- National Gallery of Art. Research Laboratory, 132
- National Paint, Varnish, and Lacquer Association, 134
- U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227

Space Biology and Medicine
- American Astronautical Society, 7
- The Boeing Co. Aero-Space Division, 43
- Federal Aviation Agency:
  - Aeronautical Center Library Service, 67
  - Headquarters Library, 68
  - Medical Reference Library, 68
- Library of Congress. Science and Technology Division, 96
- Midwest Research Institute. ASTRA, 108
- The National Academy of Sciences—National Research Council. Medical Records Section, 122
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
- Republic Aviation Corp. Engineering Library, 158
- Smithsonian Institution. Astrophysical Observatory, 165
- U.S. Department of Defense.
  - Department of the Air Force:
    - Aerospace Medical Research Laboratories, 203
    - School of Aerospace Medicine, 203
- University of Kentucky. Wenner-Gren Aeronautical Research Laboratory, 248

Spacecraft
- Aerospace Industries Association of America, Inc., 2
- American Astronautical Society, 7
- California Institute of Technology. Jet Propulsion Laboratory, 47
- Hayes International Corp., 79
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- National Aeronautics and Space Administration, 126
- Raytheon Co. Bedford Complex Library, 157
- Smithsonian Institution. National Air Museum, 166

Space Science, *see* Aerospace Sciences

Spectrochemistry
- Applied Research Laboratories, Inc., 32
- Indiana University. Chemistry Library, 84
- U.S. Department of Commerce. National Bureau of Standards. Analytical Chemical Division, 192

Spectroscopy
- American Oil Chemists' Society, 20
- American Society for Testing and Materials, 26
- Applied Research Laboratories, Inc., 32
- Armco Steel Corp. Research Center, 33
- Bell & Howell Co., 42
- Columbia University. Physics Library, 57
- Massachusetts Institute of Technology. Science Library, 103
- Mellon Institute, 105
- Oak Ridge Gaseous Diffusion Plant, 141
- Optical Society of America, 147
- Philips Laboratories, 150

Spectroscopy—Continued
- Princeton University. Astronomy Library, 153
- Sadtler Research Laboratories, 162
- Smithsonian Institution. Astrophysical Observatory, 165
- Stanford University. Swain Library of Chemistry, 173
- Texas A & M University. Chemical Thermodynamic Properties Center, 177
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Atomic Energy Levels Information Center, 192
    - Heat Division, 194
- U.S. Department of the Treasury. Bureau of Engraving and Printing, 226
- University of California, Los Angeles. Chemistry Research Library, 239
- University of Florida. Florida Engineering and Industrial Experiment Station, 244
- University of Michigan. Infrared Information and Analysis Center, 249
- University of New Hampshire. Engineering Experiment Station, 253
- Westinghouse Electric Corp. Engineering Library, 272

Speech Disorders and Therapy
- American Speech and Hearing Association, 29
- National Society for Crippled Children and Adults, 135

Springs
- Associated Spring Corp., 34

Standards
- Air Pollution Control Association, 3
- Alloy Casting Institute, 5
- Aluminum Siding Association, 5
- American Gear Manufacturers Association, 14
- American Oil Chemists' Society, 20
- American Ordnance Association, 21
- American Pharmaceutical Association, 22
- American Society for Testing and Materials, 26
- American Society of Tool and Manufacturer Engineers, 29
- American Standards Association, 30
- American Zinc Institute, Inc., 30
- Construction Specifications Institute, Inc., 58
- Dairy and Food Industries Supply Association, 60
- Illuminating Engineering Society, 83
- Institute of Boiler & Radiator Manufacturers, 86
- Institute of Textile Technology, 88
- Institute of Traffic Engineers, 88
- The National Academy of Sciences—National Research Council. Office of Critical Tables, 122
- National Canners Association, 130
- National Coal Association, 131
- National Electrical Manufacturers Association, 132
- National Fluid Power Association, 132
- National Mineral Wool Insulation Association, 133
- Pickard & Burns, Inc., 150
- Scientific Apparatus Makers Association, 163
- The Society of the Plastics Industry, Inc., 168
- Steel Founders' Society of America, 174
- Structural Engineers Association of California, 175
- Texas A & M University. Chemical Thermodynamic Properties Center, 177

Standards—Continued
- U.S. Department of Commerce.
  - Maritime Administration:
    - Office of Ship Construction, 191
  - National Bureau of Standards, 191
- U.S. Department of Defense. Department of the Navy. U.S. Naval Observatory, 205

Starch
- Keever Starch Co., 93

Statistics
- Booz, Allen Applied Research, Inc., 44
- Georgia Institute of Technology:
  - Rich Electronic Computer Center, 74
  - Technical Information Section, 74
- Harvard University:
  - George David Birkhoff Mathematical Library, 77
  - Statistics Library, 79
- Humble Oil & Refining Co. Houston Research Library, 81
- Iowa State University of Science and Technology. Statistical Laboratory, 91
- Louisiana State University. Louisiana Agricultural Experiment Station, 98
- Oak Ridge Gaseous Diffusion Plant, 141
- Princeton University. Mathematics-Physics Library, 153
- Purdue University. Computer Sciences Center, 155
- Raytheon Co.:
  - Lowell Library, 157
  - Missile Systems Division Library, 157
- Stanford University. Physics-Mathematics-Statistics Library, 173
- U.S. Department of Commerce. National Bureau of Standards. Applied Mathematics Division, 192
- U.S. Department of the Treasury. Bureau of Customs, 225
- University of Michigan. Statistical Research Laboratory, 251
- University of North Carolina:
  - Agricultural Experiment Station, 253
  - D. H. Hill Library, 254
  - Mathematics-Physics Library, 254
- University of Southern Mississippi. Library, 263
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Steel
- Allegheny Ludlum Steel Corp. Research Center Library, 4
- American Iron and Steel Institute, 18
- Armco Steel Corp. Research Center, 33
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Bethlehem Steel Co.:
  - Homer Research Laboratories, 42
  - Schwab Memorial Library, 43
- Crucible Steel Co. of America, 60
- International Nickel Co., Inc., 89
- Republic Steel Corp. Research Center Library, 159
- Steel Founders' Society of America, 174
- University of California, Berkeley. General Library, 238

Sterility
- Margaret Sanger Research Bureau, 100

Strain Gages, *see* Measuring Devices

Stress Analysis
- The Boeing Co. Aero-Space Division, 43
- Franklin Institute. Laboratories for Research and Development, 70
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- Massachusetts Institute of Technology. Aeronautics and Astronautics Library, 101
- Stein Engineering Services, Inc., 174
- U.S. Department of the Treasury. U.S. Coast Guard. Ship Structure Committee, 228
- University of Colorado. Engineering Research Center, 241
- Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Strontium
- Barium & Chemicals, Inc., 38

Structural Engineering
- American Society of Civil Engineers, 28
- The Boeing Co. Airplane Division—Wichita Branch, 44
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- Massachusetts Institute of Technology:
  - Aeronautics and Astronautics Library, 101
  - Department of Civil Engineering, 101
- Republic Aviation Corp. Engineering Library, 158
- Structural Engineers Association of California, 175
- U.S. Department of Commerce. National Bureau of Standards. Building Research Division, 193
- U.S. Department of Defense. Defense Documentation Center, 202
- University of Rhode Island. Division of Engineering Research and Development, 262
- The University of Texas. Structural Mechanics Research Laboratory, 265

Structural Materials
- Aerojet-General Corp. Corporate Technical Information Center, 1
- Belfour Engineering Co. Mechanical Properties Data Center, 41
- Massachusetts Institute of Technology. Materials Research Laboratory, 103
- National Aeronautics and Space Administration. Scientific and Technical Information Division, 127

Sugar
- American Society of Sugar Beet Technologists, 29
- Beet Sugar Development Foundation, 41
- Franklin Institute. Library, 71
- Louisiana State University:
  - Louisiana Agricultural Experiment Station, 98
  - Main Library, 98
- U.S. Department of the Treasury. Bureau of Customs, 225
- University of Florida. Agricultural Experiment Stations, 243

Sulphite Liquor
- Sulphite Pulp Manufacturers' Research League, 175

Sulphur
- Sulphur Institute, 175
- University of Michigan. Mineral Museum, 249

Superconductors
  Cambridge Communications Corp., 48
  National Research Corp., 134

Surface Chemistry
  Cheminform Institute, 53
  Harris Research Laboratories, Inc., 76
  New Mexico Highlands University. Institute of Scientific Research, 137
  Nopco Chemical Co., 139
  Petrolite Corp. Library and Information Retrieval Center, 150
  Stanford University. Swain Library of Chemistry, 173
  Virginia Institute for Scientific Research, 269

Surgery
  American College of Surgeons, 9
  American Heart Association, 15
  California College of Medicine, 46
  College of Physicians of Philadelphia, 55
  Columbia University. Medical Library, 57
  Denver Medical Society, 61
  Dow Corning Center for Aid to Medical Research, 63
  Straub Clinic, 175
  U.S. Veterans Administration. Medical and General Reference Library, 229
  University of Notre Dame. Lobund Laboratory, 255
  University of Pennsylvania. University Hospital Library, 260
  The University of Texas. M. D. Anderson Hospital and Tumor Institute, 263
  See also Oral Surgery

Surveying
  American Society of Civil Engineers, 28
  U.S. Department of Commerce. Coast and Geodetic Survey, 188
  U.S. Department of the Interior:
    Bureau of Land Management, 207
    Geological Survey, 221

Systems Analysis and Design
  Aries Corp., 33
  Booz, Allen Applied Research, Inc., 44
  Dunlap & Associates, Inc., 64
  Federal Aviation Agency. National Aviation Facilities Experimental Center, 68
  Franklin Institute. Computing Center, 70
  Georgia Institute of Technology. Rich Electronic Computer Center, 74
  Massachusetts Institute of Technology. Department of Civil Engineering, 101
  National Aeronautics and Space Administration. Scientific and Technical Information Division, 127
  Republic Aviation Corp. Engineering Library, 158
  Stanford University. Stanford Electronics Laboratories, 173
  System Development Corp., 176
  TRW Space Technology Laboratories, 179
  U.S. Department of Commerce. National Bureau of Standards. Information Technology Division, 194
  U.S. Department of Defense. Defense Documentation Center, 202

Systems Analysis and Design—Continued
  See also Command and Control Systems *and* Guidance and Control Systems

Tantalum
  Battelle Memorial Institute. Defense Metals Information Center, 39

Taxonomy
  Carnegie Institution of Washington, Department of Plant Biology, 50
  Entomological Society of America, 66
  Harvard University. Arnold Arboretum and Gray Herbarium, 76
  Iowa State University of Science and Technology. Systematic Bacteriology Research Group, 91
  McLean Paleontological Laboratory, 99
  Pacific Coast Entomological Society, 148
  Smithsonian Institution. Canal Zone Biological Area, 166
  Society of Vertebrate Paleontology, 169
  U.S. Department of the Interior. Fish and Wildlife Service. Bureau of Sport Fisheries and Wildlife. Bird and Mammal Laboratories, 218
  University of Colorado. Institute of Arctic and Alpine Research, 241
  University of Michigan. University Herbarium, 251
  University of Nevada. Biology Museum and Research Laboratories, 252
  University of Oklahoma. Palynology Research Center, 257
  University of Wyoming. Jackson Hole Biological Research Station, 268
  West Virginia University. Herbarium, 273

Telemetry
  Battelle Memorial Institute. Transducer Information Center, 40
  Stein Engineering Services, Inc., 174
  Winzen Research, Inc., 274

Tellurium
  Battelle Memorial Institute, 38

Temperature Measurement, *see* Heat Measurement

Termites, *see* Pest Control

Terrestrial Magnetism, *see* Geomagnetism

Testing
  Aircraft Technical Service, Inc., 3
  American Bio-Synthetics Corp., 7
  American Society for Testing and Materials, 26
  Avco Corp. Lycoming Division, 37
  Battelle Memorial Institute. Electronic Component Reliability Center, 39
  Belfour Engineering Co. Mechanical Properties Data Center, 41
  Consumers Union of the United States, Inc., 59
  Doty Laboratories, 62
  Fluidyne Engineering Corp., 69
  Foster D. Snell, Inc., 70
  Hayes International Corp., 79
  Institute of Textile Technology, 88
  Johns Hopkins University. Chemical Propulsion Information Agency, 92

Testing—Continued
- Manlabs, Inc., 100
- National Gallery of Art. Research Laboratory, 132
- National Paint, Varnish, and Lacquer Association, 134
- New York University. Project SETE, 138
- A. O. Smith Corp., 164
- Society for Nondestructive Testing, 168
- The Society of the Plastics Industry, Inc., 168
- Troxler Electronic Laboratories, Inc., 179
- United Aircraft Corp. Research Library, 179
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Building Research Division, 193
    - Polymers Division, 197
- U.S. Department of the Interior. Bonneville Power Administration, 207
- U.S. Department of the Treasury.
  - Bureau of Customs, 225
  - Internal Revenue Service:
    - National Office Laboratory, 227
- University of Florida. Florida Engineering and Industrial Experiment Station, 244
- University of New Hampshire. Engineering Experiment Station, 253
- The University of Texas. Military Physics Research Laboratory, 265

Textiles
- American Association of Textile Chemists and Colorists, 6
- American Institute of Laundering, 17
- American Society for Quality Control, Inc., 26
- American Society for Testing and Materials, 26
- Battelle Memorial Institute. Library, 40
- Celanese Corp. of America. Summit Research Laboratories, 52
- Cheminform Institute, 53
- Consumers Union of the United States, Inc., 59
- E. I. Du Pont de Nemours & Co., Inc. Technical Library—Chestnut Run Branch, 64
- Fiber Society, Inc., 68
- Foster D. Snell, Inc., 70
- Georgia Institute of Technology:
  - Price Gilbert Memorial Library, 74
  - Technical Information Section, 74
- Harris Research Laboratories, Inc., 76
- The Institute of Paper Chemistry, 87
- Institute of Textile Technology, 88
- Karl M. Fox Consulting Research Service and Library, 93
- Nopco Chemical Co., 139
- Pennsalt Chemicals Corp., 149
- Textile Research Institute, 178
- U.S. Department of Commerce. National Bureau of Standards. NBS Library, 195
- U.S. Department of the Treasury. Bureau of Customs, 225
- University of North Carolina. D. H. Hill Library, 254

Thermal Properties, *see* Properties

Thermodynamics
- Avco Corp. Lycoming Division, 37
- The Boeing Co. Aero-Space Division, 43
- Columbia University:
  - Chemistry Library, 56
  - Physics Library, 57

Thermodynamics—Continued
- Duke University. Chemistry Library, 63
- Harvard University. Gordon McKay Library of Engineering and Applied Physics, 77
- Johns Hopkins University. Chemical Propulsion Information Agency, 92
- Massachusetts Institute of Technology:
  - Aeronautics and Astronautics Library, 101
  - Neurosciences Research Information Center, 103
- The National Academy of Sciences—National Research Council. Office of Critical Tables, 122
- National Center for Atmospheric Research. NCAR Library, 130
- New Mexico Highlands University. Institute of Scientific Research, 137
- Smithsonian Institution. Astrophysical Observatory, 165
- Texas A & M University. Chemical Thermodynamic Properties Center, 177
- U.S. Department of Commerce.
  - National Bureau of Standards:
    - Cryogenic Data Center, 193
    - NBS Library, 195
- U.S. Department of the Interior.
  - Bureau of Mines:
    - Albany Metallurgy Research Center, 208
    - Berkeley Thermodynamics Laboratory, 209
    - Minneapolis Metallurgy Research Center, 214
    - Reno Metallurgy Research Center, 214
    - Tuscaloosa Metallurgy Research Center, 215
- University of California, Los Angeles. Chemistry Research Library, 239

Thermometry, *see* Heat Measurement

Thermophysical Properties, *see* Properties

Tin
- U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209

Titanium
- Battelle Memorial Institute. Defense Metals Information Center, 39
- Crucible Steel Co. of America, 60
- National Lead Co.:
  - Titanium Alloy Manufacturing Division, 133
  - Titanium Division, 133

Tobacco
- Philip Morris, Inc., 150
- U.S. Department of the Treasury. Internal Revenue Service. National Office Laboratory, 227
- University of Florida. Agricultural Experiment Stations, 243
- University of North Carolina. D. H. Hill Library, 254
- Virginia Institute for Scientific Research, 269

Toxicology
- American Industrial Hygiene Association, 16
- American Zinc Institute, Inc., 30
- Chemical Insecticide Corp., 53
- Dry Color Manufacturers' Association, 63

Toxicology—Continued
  Entomological Society of America, 66
  Foster D. Snell, Inc., 70
  Hazleton Laboratories, Inc., 79
  Karl M. Cox Consulting Research Service and Library, 93
  Library of Congress. Science and Technology Division, 96
  Lilly Research Laboratories, 97
  Massachusetts Institute of Technology. Department of Nutrition and Food Science, 102
  Mead Johnson & Co., 104
  Mellon Institute, 105
  Pennsylvania Department of Health. Division of Air Pollution Control, 149
  Pharmacology Research, Inc., 150
  Pharmadynamics, Inc., 150
  Purdue University. Trace Level Research Institute, 156
  U.S. Department of Agriculture. Agricultural Research Service. National Animal Disease Laboratory, 183
  University of California, Los Angeles. Chemistry Research Library, 239
  University of Washington. Environmental Health Division, 267

Trademarks
  Automobile Manufacturers Association, 36
  Cheminform Institute, 53
  Franklin Institute. Library, 71
  George Washington University. Patent, Trademark, and Copyright Foundation, 74
  U.S. Department of Commerce. Patent Office, 198

Traffic Engineering
  Automotive Safety Foundation, 36
  Institute of Traffic Engineers, 88
  Massachusetts Institute of Technology. Joint Highway Research Project, 102
  Purdue University. Joint Highway Research Project, 155
  University of California. Institute of Transportation and Traffic Engineering, 237

Transducers
  Battelle Memorial Institute. Transducer Information Center, 40
  Bell & Howell Co., 42
  Raytheon Co. Submarine Signal Operations Library, 158
  Stein Engineering Services, Inc., 174

Transistors
  Derivation & Tabulation Associates, Inc., 61
  Philips Laboratories, 150
  Raytheon Co. Semiconductor Division Technical Library, 157

Transportation
  Arctic Institute of North America. Arctic Bibliograhy Project, 32
  Battelle Memorial Institute. Area Economics Information Center, 38
  Booz, Allen Applied Research, Inc., 44
  Bureau of Railway Economics, 46
  Copper Development Association, Inc., 59
  Eaton Manufacturing Co. Research Center, 65
  Massachusetts Institute of Technology:
    Department of Civil Engineering, 101
    Joint Highway Research Project, 102

Transportation—Continued
  The National Academy of Sciences—National Research Council. Maritime Cargo Transportation Conference, 121
  National Coal Association, 131
  Princeton University:
    Bureau of Urban Research, 152
    River and Harbor Library, 154
  U.S. Department of Defense. Defense Documentation Center, 202
  University of California. Institute of Transportation and Traffic Engineering, 237
  University of Colorado. Engineering Research Center, 241
  University of Michigan. Science and Engineering Libraries, 250
  See also Air Transportation *and* Railroads

Tropical Agriculture
  University of Florida. Agricultural Experiment Stations, 243

Tropical Flora and Fauna
  Pacific Vegetation Project, 148
  Smithsonian Institution. Canal Zone Biological Area, 166
  University of Florida. Agricultural Experiment Stations, 243

Tropical Medicine
  American Foundation for Tropical Medicine, 13
  Louisiana State University. School of Medicine, 99
  The National Academy of Sciences—National Research Council. Tropical Health Office, 125

Tumors, *see* Oncology

Tungsten
  Battelle Memorial Institute. Defense Metals Information Center, 39
  Climax Molybdenum Co., 54
  U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209

Ultraviolet
  American Society for Testing and Materials, 26
  Sadtler Research Laboratories, 162
  Ultra-Violet Products, Inc., 179

Upper Atmosphere, *see* Atmospheric Physics

Uranium
  Atomic Industrial Forum, Inc., 35
  Mallinckrodt Chemical Works. Uranium Division, 99

Urban Planning
  The American Institute of Architects, 16
  American Society of Civil Engineers, 28
  Battelle Memorial Institute. Area Economics Information Center, 38
  Ohio State University. Brown Hall Library, 144
  Princeton University. Bureau of Urban Research, 152
  University of California. Institute of Transportation and Traffic Engineering, 237
  University of California, Berkeley. General Library, 238
  University of Illinois. City Planning and Landscape Architecture Library, 245

Vacuum Technology
  National Research Corp., 134
  Rochester Institute of Technology. Library, 160
  University of Nevada. Desert Research Institute, 252
  Westinghouse Electric Corp. Westinghouse Research and Development Center, 272
Vacuum Tubes, *see* Electronics
Vanadium
  Battelle Memorial Institute. Defense Metals Information Center, 39
  Climax Molybdenum Co., 54
  U.S. Department of the Interior. Bureau of Mines. College Park Metallurgy Research Center, 209
Varnishes
  Archer-Daniels-Midland Co. T. L. Daniels Research Center, 32
  Foster D. Snell, Inc., 70
  National Gallery of Art. Research Laboratory, 132
  Textron, Inc., 178
  U.S. Department of the Treasury. Bureau of Engraving and Printing, 226
  See also Paints and Lacquers
Ventilation
  American Industrial Hygiene Association, 16
  Carrier Research & Development Co. Logan Lewis Library, 51
  U.S. Department of the Interior. Bureau of Mines. Office of the Assistant Director, Health and Safety, 211
Veterinary Science
  Chas. Pfizer & Co., Inc. Medical Research Laboratories, 53
  Colorado State University. University Libraries, 56
  Denver Medical Society, 61
  Iowa State University of Science and Technology:
    Institute for Atomic Research, 90
    Iowa Agriculture and Home Economics Experiment Station, 90
  Lilly Research Laboratories, 97
  Louisiana State University. Louisiana Agricultural Experiment Station, 98
  Medical Chemicals Corp., 104
  Michigan State University. Agricultural Experiment Station, 107
  Ohio Agricultural Experiment Station, 143
  Ohio State University. Veterinary Medicine Library, 146
  Purdue University:
    Agricultural Information Department, 154
    University Libraries and Audio-Visual Center, 156
  Rhode Island Medical Society, 159
  Rutgers—The State University. New Jersey College of Agriculture Library, 161
  Smithsonian Institution. National Zoological Park, 166
  Texas A & M University:
    Cushing Memorial Library, 177
    Texas Agricultural Experiment Station, 178
  U.S. Department of Agriculture.
    Agricultural Research Service:
      National Animal Disease Laboratory, 183
    National Agricultural Library, 185
Veterinary Science—Continued
  University of Illinois:
    Illinois Agricultural Experiment Station, 246
    Veterinary Medicine Library, 247
  University of Pennsylvania. C. J. Marshall Memorial Library, 259
  University of Wyoming. Agricultural Experiment Station, 268
  See also Animal Nutrition *and* Animal Pathology
Virology
  University of California, Berkeley. American Committee on Arthropod-borne Viruses, 237
  University of Notre Dame. Lobund Laboratory, 255
  University of Pennsylvania. Wistar Institute Library, 260
Vision, *see* Ophthalmology
Vitamins
  Chas. Pfizer & Co., Inc. Medical Research Laboratories, 53
  Creedmoor Institute for Psychobiologic Studies, 60
  Doty Laboratories, 62
  Hoffmann-La Roche, Inc., 80
  Medical Chemicals Corp., 104
  The National Vitamin Foundation, Inc., 136
  Nopco Chemical Co., 139
Volcanology
  U.S. Department of the Interior. Geological Survey, 221
  The University of Texas. Geology Library, 264

Warfare, *see* Military Science and Technology
Waste Disposal
  American Petroleum Institute, 22
  Battelle Memorial Institute. Area Economics Information Center, 38
  Carl A. Bays & Associates, Inc., 49
  Cyrus Wm. Rice & Co., 60
  The National Academy of Sciences—National Research Council. Committee on Sanitary Engineering and Environment, 116
  Ohio State University. Natural Resources Institute, 145
  Sulphite Pulp Manufacturers' Research League, 175
  U.S. Department of Health, Education, and Welfare. Public Health Service. Inquiries Branch, Office of Information and Publications, 206
  University of California, Berkeley. Water Resources Center Archives, 238
  Water Information Center, Inc., 270
  Water Pollution Control Federation, 270
Waste Utilization
  The Chemurgic Council, 54
  Institute of Scrap Iron and Steel, Inc., 87
  National Coal Association. Bituminous Coal Research, Inc., 131
  Sulphite Pulp Manufacturers' Research League, 175
Water Conservation
  American Society of Agronomy, 27
  Resources for the Future, Inc., 159
  Rochester Institute of Technology. Library, 160

Water Conservation—Continued
  Soil Conservation Society of America, 169
  U.S. Department of Agriculture. Soil Conservation Service, 187
  Water Information Center, Inc., 270

Water Pollution
  American Fisheries Society, 12
  Battelle Memorial Institute. Area Economics Information Center, 38
  Franklin Institute. Laboratories for Research and Development, 70
  Gulf Coast Research Laboratory, 75
  Institute for Fisheries Research, 85
  Mellon Institute, 105
  National Coal Association. Bituminous Coal Research, Inc., 131
  Scientists' Institute for Public Information, 164
  Sulphite Pulp Manufacturers' Research League, 175
  Tennessee Valley Authority. Technical Library, 177
  U.S. Department of Health, Education, and Welfare. Public Health Service. Inquiries Branch, Office of Information and Publications, 206
  U.S. Department of the Interior.
    Bureau of Mines:
      Office of Program Coordinator, 211
    Bureau of Reclamation, 215
  Water Information Center, Inc., 270
  Water Pollution Control Federation, 270

Water Resources
  Battelle Memorial Institute. Area Economics Information Center, 38
  Carl A. Bays & Associates, Inc., 49
  Georgia Institute of Technology. Technical Information Section, 74
  Geosurveys, 75
  Indiana University. Geology Library, 84
  Kansas State Geological Survey, 93
  Massachusetts Institute of Technology:
    Department of Civil Engineering, 101
    Hydrodynamics Laboratory, 102
  Resources for the Future, Inc., 159
  U.S. Department of the Interior.
    Bureau of Mines:
      Office of the Assistant Director, Mineral Resource Development, 213
    Geological Survey, 221
  University of California, Berkeley. Water Resources Center Archives, 238
  University of Oklahoma. Bureau of Water Resources Research, 255
  University of Wyoming. Natural Resources Research Institute, 268
  Water Information Center, Inc., 270

Watershed Management
  American Forest Products Industries, Inc., 12
  American Forestry Association, 12
  Society of American Foresters, 168
  U.S. Department of Agriculture. Soil Conservation Service, 187

Watershed Management—Continued
  University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
  University of Colorado. Institute of Arctic and Alpine Research, 241

Water-Supply Engineering
  American Society of Sanitary Engineering, 29
  Battelle Memorial Institute. Area Economics Information Center, 38
  Cyrus Wm. Rice & Co., 60
  The National Academy of Sciences—National Research Council. Committee on Sanitary Engineering and Environment, 116
  Ohio State University. Natural Resources Institute, 145
  U.S. Department of Agriculture. Soil Conservation Service, 187
  U.S. Department of the Interior. Bureau of Reclamation, 215
  University of California, Berkeley. Water Resources Center Archives, 238
  Water Information Center, Inc., 270

Water Transportation, *see* Transportation

Water Treatment
  Battelle Memorial Institute. Area Economics Information Center, 38
  Carus Chemical Co. Permanganate Information Service, 51
  Cyrus Wm. Rice & Co., 60
  Dearborn Chemical Co., 60
  Nalco Chemical Co., 111
  Rochester Institute of Technology. Library, 160
  U.S. Department of the Interior. Office of Saline Water, 225
  Water Information Center, Inc., 270

Waxes
  American Oil Chemists' Society, 20
  American Petroleum Institute, 22
  American Society for Testing and Materials, 26
  Cheminform Institute, 53
  Foster D. Snell, Inc., 70
  Petrolite Corp. Library and Information Retrieval Center, 150
  U.S. Department of the Treasury. Bureau of Customs, 225

Weapons and Weapon Systems
  Aerojet-General Corp. Corporate Technical Information Center, 1
  Allied Research Associates, Inc., 4
  American Ordnance Association, 21
  Avco Corp. Ordnance Division, 37
  Battelle Memorial Institute. Battelle Defender, 38
  Illinois Institute of Technology. IIT Research Institute, 81
  Olin Mathieson Chemical Corp. Olin Research Center, 146
  Raytheon Co.:
    Equipment Division Headquarters Library, 157
    Submarine Signal Operations Library, 158
  U.S. Department of Defense. Department of the Air Force. School of Aerospace Medicine, 203

Weapons and Weapon Systems—Continued
  The University of Texas. Defense Research Laboratory, 264

Weather, *see* Meterology

Weather Forecasting
  American Meteorological Society, 19
  Franklin Institute. Weather Center, 71
  U.S. Department of Commerce. Weather Bureau, 201

Weather Maps
  National Center for Atmospheric Research. High Altitude Observatory Library, 130
  U.S. Department of Commerce. Weather Bureau, 201

Weather Modification
  American Meterological Society, 19
  U.S. Department of Commerce. Weather Bureau, 201
  U.S. Department of the Interior. Bureau of Reclamation, 215
  University of Arizona. Institute of Atmospheric Physics, 236
  University of Wyoming. Natural Resources Research Institute, 268

Weed Control
  American Society of Agronomy, 27
  Michigan State University. Agricultural Experiment Station, 107
  Nalco Chemical Co., 111
  U.S. Department of the Interior. Bureau of Reclamation, 215
  University of Wyoming. Agricultural Experiment Station, 268
  West Virginia University. West Virginia Agricultural Experiment Station, 274

Weights and Measures, *see* Metrology

Welding
  Allegheny Ludlum Steel Corp. Research Center Library, 4
  American Welding Society, 30
  Bethlehem Steel Co. Homer Research Laboratories, 42
  Engineering Societies Library, 65
  Ohio State University. Davis Welding Library, 144
  Pneumodynamics Corp. Cleveland Pneumatic Division, 151
  A. O. Smith Corp., 164
  U.S. Department of the Treasury. U.S. Coast Guard. Ship Structure Committee, 228
  University of Toledo. Library, 265
  Welding Research Council, 271
  Westinghouse Electric Corp. Westinghouse Research and Development Center, 272

Well Logs
  Illinois State Geological Survey, 82
  Kansas State Geological Survey, 93
  National Lead Co. Baroid Division, 133
  U.S. Department of the Interior. Geological Survey. Main Library, 222
  University of Michigan. Subsurface Laboratory and Core Library, 251

Well Logs—Continued
  University of Oklahoma. Geology Library, 256
  The University of Texas. Bureau of Economic Geology, 263
  University of Tulsa. Information Services Department, 266

Wildlife
  American Forestry Association, 12
  Illinois Natural History Survey, 82
  Michigan State University, 107
  National Audubon Society, 129
  National Wildlife Federation, 136
  Ohio State University:
    Botany and Zoology Library, 144
    Ohio Cooperative Wildlife Research Unit, 146
    Natural Resources Institute, 145
  Iowa State University of Science and Technology. Iowa Agriculture and Home Economics Experiment Station, 90
  Rutgers—The State University. New Jersey College of Agriculture Library, 161
  Smithsonian Institution. Canal Zone Biological Area, 166
  U.S. Department of the Interior.
    Bureau of Land Management, 207
    Fish and Wildlife Service:
      Bureau of Sport Fisheries and Wildlife, 217
    National Park Service, 223
  University of Arizona. Arizona Cooperative Wildlife Research Unit, 236
  West Virginia University. West Virginia Agricultural Experiment Station, 274
  Wildlife Management Institute, 274
  See also Conservation

Wind Tunnels, *see* Aerodynamics

Wire and Cable
  Anaconda Wire and Cable Co., 31
  National Electrical Manufacturers Association, 132

Wood
  American Forest Products Industries, Inc., 12
  American Plywood Association, 24
  American Pulpwood Association, 24
  American Society for Testing and Materials, 26
  Architectural Woodwork Institute, 32
  California Redwood Association, 47
  Forest Products Research Society, 70
  Hardwood Plywood Manufacturers Association, 76
  Hercules Research Center, 80
  The Institute of Paper Chemistry, 87
  Massachusetts Institute of Technology. Materials Research Laboratory, 103
  Michigan Technological University.
    Ford Forestry Center, 107
    Institute of Wood Research, 108
  Rayonier, Inc., 156
  Society for Nondestructive Testing, 168
  Society of American Foresters, 168
  Sulphite Pulp Manufacturers' Research League, 175
  University of Florida. Florida Engineering and Industrial Experiment Station, 244
  Western Pine Association, 271

Wool
- U.S. Department of Agriculture. Agricultural Research Service. Western Utilization Research and Development Division, 183
- U.S. Department of the Treasury. Bureau of Customs, 225
- University of Wyoming:
  - Agricultural Experiment Station, 268
  - University Library, 269

X-rays
- Applied Research Laboratories, Inc., 32
- Armco Steel Corp. Research Center, 33
- Philips Laboratories, 150
- U.S. Department of the Treasury. Bureau of Customs, 225
- University of Nevada. Desert Research Institute, 252
- University of New Hampshire. Engineering Experiment Station, 253
- Westinghouse Electric Corp.:
  - Engineering Library, 272
  - Westinghouse Research and Development Center, 272

Yellow Fever, *see* Tropical Medicine

Zinc
- American Bureau of Metal Statistics, 7
- American Zinc Institute, Inc., 30
- U.S. Department of the Treasury. Bureau of the Mint, 226

Zirconium
- Carborundum Co., 49
- National Lead Co. Titanium Alloy Manufacturing Division, 133
- U.S. Department of the Interior. Bureau of Mines. Albany Metallurgy Research Center, 208

Zoology
- Arctic Institute of North America. Arctic Bibliography Project, 32
- Columbia University, Biological Sciences Library, 56
- Duke University:
  - Biology-Forestry Library, 63
  - Marine Laboratory, 64
- Gulf Coast Research Laboratory, 75
- Harvard University. Museum of Comparative Zoology, 78
- Highlands Biological Station, Inc., 80
- Illinois Natural History Survey, 82
- Indiana University. Biology Library, 84
- Iowa State University. Institute for Atomic Research, 90
- Miami University. Zoology Museum, 107
- Mount Desert Island Biological Laboratory, 110
- Museum of Northern Arizona, 111

Zoology—Continued
- The National Academy of Sciences—National Research Council. Office of the Foreign Secretary, 123
- New York Zoological Society, 139
- Ohio Agricultural Experiment Station, 143
- Ohio State University:
  - Botany and Zoology Library, 144
  - Natural Resources Institute, 145
  - Ohio Biological Survey, 146
- Princeton University. Biology and Geology Library, 153
- Rutgers—The State University:
  - Newark Colleges Library, 161
  - New Jersey Agricultural Experiment Station, 161
  - New Jersey College of Agriculture Library, 161
- Smithsonian Institution:
  - Canal Zone Biological Area, 166
  - National Zoological Park, 166
  - U.S. National Museum:
    - Museum of Natural History, 167
- Southern California Academy of Sciences, 170
- Stanford University. Falconer Biology Library, 173
- Texas A & M University. Texas Agricultural Experiment Station, 178
- University of Arizona. Library, 236
- University of California, Los Angeles. Biomedical Library, 239
- University of Colorado:
  - Institute of Arctic and Alpine Research, 241
  - Museum, 242
- University of Illinois. Biology Library, 245
- University of Michigan:
  - Museum of Zoology, 250
  - Science and Engineering Libraries, 250
- University of Nevada. Biology Museum and Research Laboratories, 252
- University of North Carolina:
  - Agricultural Experiment Station, 253
  - Zoological Library, 254
- University of Notre Dame. Biology Library, 255
- University of Oklahoma. Science Library, 257
- University of Pennsylvania. Biology Library, 257
- University of Southern Mississippi. Library, 263
- The University of Texas. Biology Library, 263
- University of Wyoming:
  - Jackson Hole Biological University Library, 269
  - Research Station, 268
- *See also* Arachnology, Conchology, Entomology, Herpetology, Ichthyology, Malacology, Mammalogy, Ornithology, *and* Tropical Fauna and Flora

Zoos
- American Association of Museums, 6

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